

Safety Data Sheet SIP6911.0
Date of issue: 17/11/2014 Version: 1.0

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

1.1. Product identifier

Product form : Substance
Physical state : Liquid

Substance name : n-PROPYLDIMETHYLMETHOXYSILANE

Product code : SIP6911.0 Formula : C6H16OSi

Synonyms : METHOXYPROPYLDIMETHYLSILANE

Chemical family : ORGANOMETHOXYSILANE

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Chemical intermediate

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

GELEST, INC.

11 East Steel Road Morrisville, PA 19067

USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

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info@gelestde.com - www.gelestde.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3

Serious eye damage/eye irritation, Category 2

H319

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02



GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H226 - Flammable liquid and vapour.
H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P280 - Wear protective gloves/protective clothing/eye protection.

P264 - Wash hands thoroughly after handling.

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P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240 - Ground/bond container and receiving equipment.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

Other hazards 2.3

No additional information available

SECTION 3: Composition/information on ingredients

Substances

Substance type : Multi-constituent

Name : n-PROPYLDIMETHYLMETHOXYSILANE

CAS-No. : 18182-14-4

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
n-Propyldimethylmethoxysilane	(CAS-No.) 18182-14-4	> 95	Flam. Liq. 3, H226 Eye Irrit. 2, H319
Methanol	(CAS-No.) 67-56-1 (EC-No.) 200-659-6 (EC Index-No.) 603-001-00-X	< 0.5	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 STOT SE 1, H370

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Methanol	(CAS-No.) 67-56-1 (EC-No.) 200-659-6	(3 = <c 10)="" 2,="" <="" h371<br="" se="" stot="">(10 =<c 1,="" 100)="" <="" h370<="" se="" stot="" th=""></c></c>
	(EC Index-No.) 603-001-00-X	

Full text of H-statements: see section 16

3.2. **Mixtures**

Not applicable

SECTION 4: First aid measures

Description of first aid measures

: Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek First-aid measures general

medical advice immediately (show the label where possible). If possible show this sheet; if not

available show packaging or label.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical

advice.

First-aid measures after skin contact : Wash with plenty of water/....

First-aid measures after eye contact Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion Never give anything by mouth to an unconscious person. Get medical advice/attention.

42 Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : May cause skin irritation. Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms/effects after ingestion : May be harmful if swallowed.

Chronic symptoms On contact with water this compound liberates methanol which is known to have a chronic

effect on the central nervous system.

Indication of any immediate medical attention and special treatment needed

NOTE TO PHYSICIAN: This product reacts with water in the acid contents of the stomach to form methanol. The combination of visual disturbances, metabolic acidosis and formic acid in urine is evidence of methanol poisoning. The therapeutic intravenous administration of ethanol (10 mls/hour) allows methanol to be preferentially oxidized and reduces production of methanol metabolites. Acidosis must be treated with intravenous administration of sodium bicarbonate and methanol elimination may be increased by hemodialysis, as indicated. Treatment should be based on blood methanol levels and acid-base balance.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media : None known

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour. Irritating fumes and organic acid vapors may develop when

material is exposed to elevated temperatures or open flame.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Avoid all eye and skin contact and do not breathe vapour and mist. Vapors extremely

dangerous to eyes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or

shovel spills into appropriate container for disposal. Use only non-sparking tools.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling

: Avoid all eye and skin contact and do not breathe vapour and mist. Containers must be properly grounded before beginning transfer. Provide good ventilation in process area to prevent formation of vapour. Take precautionary measures against static discharge. Use on

properly grounded before beginning transfer. Provide good ventilation in process area to prevent formation of vapour. Take precautionary measures against static discharge. Use only non-sparking tools.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Keep container tightly closed.

Incompatible materials : Oxidizing agent.

Storage area : Store in a well-ventilated place. Store away from heat.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Methanol (67-56-1)		
EU	IOELV TWA (mg/m³)	260 mg/m ³
EU	IOELV TWA (ppm)	200 ppm
Austria	MAK (mg/m³)	260 mg/m³
Austria	MAK (ppm)	200 ppm
Austria	MAK Short time value (mg/m³)	1040 mg/m ³
Austria	MAK Short time value (ppm)	800 ppm
Belgium	Limit value (mg/m³)	266 mg/m³
Belgium	Limit value (ppm)	200 ppm
Belgium	Short time value (mg/m³)	333 mg/m³

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Finland HTP-arvo (8h) (ppm) 200 ppm	Denmark	Grænseværdie (langvarig) (ppm)	200 ppm
() (1)	Finland	HTP-arvo (8h) (mg/m³)	270 mg/m³
Finland HTP-arvo (15 min) 330 mg/m³	Finland	. , , , ,	1.
	Finland	HTP-arvo (15 min)	330 mg/m³

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Methanol (67-56-1)		
Finland	HTP-arvo (15 min) (ppm)	250 ppm
Hungary	AK-érték	260 mg/m³
Ireland	OEL (8 hours ref) (mg/m³)	260 mg/m³
Ireland	OEL (8 hours ref) (ppm)	200 ppm
Ireland	OEL (15 min ref) (mg/m3)	780 mg/m³ (calculated)
Ireland	OEL (15 min ref) (ppm)	600 ppm (calculated)
Lithuania	IPRV (mg/m³)	260 mg/m³
Lithuania	IPRV (ppm)	200 ppm
Malta	OEL TWA (mg/m³)	260 mg/m³
Malta	OEL TWA (ppm)	200 ppm
Norway	Grenseverdier (AN) (mg/m³)	130 mg/m³
Norway	Grenseverdier (AN) (ppm)	100 ppm
Norway	Grenseverdier (Korttidsverdi) (mg/m3)	130 mg/m³
Norway	Grenseverdier (Korttidsverdi) (ppm)	100 ppm
Poland	NDS (mg/m³)	100 mg/m³
Poland	NDSCh (mg/m³)	300 mg/m³
Romania	OEL TWA (mg/m³)	260 mg/m³
Romania	OEL TWA (ppm)	200 ppm
Romania	OEL STEL (ppm)	5 ppm
Slovakia	NPHV (priemerná) (mg/m³)	260 mg/m³
Slovakia	NPHV (priemerná) (ppm)	200 ppm
Sweden	nivågränsvärde (NVG) (mg/m³)	250 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	200 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	350 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	250 ppm
Canada (Quebec)	VECD (mg/m³)	328 mg/m³
Canada (Quebec)	VECD (ppm)	250 ppm
Canada (Quebec)	VEMP (mg/m³)	262 mg/m³
Canada (Quebec)	VEMP (ppm)	200 ppm
Australia	TWA (mg/m³)	262 mg/m³
Australia	TWA (ppm)	200 ppm
Australia	STEL (mg/m³)	328 mg/m³
Australia	STEL (mg/m)	250 ppm
Portugal	OEL TWA (mg/m³)	260 mg/m³ (indicative limit value)
Portugal	OEL TWA (mg/m²) OEL TWA (ppm)	
		200 ppm (indicative limit value)
Portugal Portugal	OEL STEL (ppm) OEL chemical category (PT)	250 ppm skin - potential for cutaneous exposure indicative lim value

8.2. Exposure controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation.

Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection:

Neoprene or nitrile rubber gloves

Eye protection:

Chemical goggles. Contact lenses should not be worn

Skin and body protection:

Wear suitable protective clothing

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Respiratory protection:

NIOSH-certified organic vapor (black cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear liquid.

Molecular mass : 132.28 g/mol

Colour : No data available

Odour threshold : No data available

Refractive index : 1.3927

pH : No data available

Relative evaporation rate (butylacetate=1) : < 1 Melting point : < 0 °C

Freezing point : No data available
Boiling point : 94 - 96 °C
Flash point : 27 °C

Auto-ignition temperature : No data available Decomposition temperature : No data available

Flammability (solid, gas) : Flammable liquid and vapour.

Vapour pressure : No data available

Relative vapour density at 20 °C : > 1
Relative density : 0.787
% Volatiles : 100 %

Solubility : Insoluble in water. Reacts with water.

Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Material decomposes slowly in contact with moist air or with water liberating methanol.

10.4. Conditions to avoid

Heat. Sparks. Open flame.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Methanol. Organic acid vapors. Silicon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Methanol (67-56-1)		
	LC50 inhalation rat (ppm)	22500 ppm (Exposure time: 8 h)
	ATE CLP (oral)	100 mg/kg bodyweight

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Methanol (67-56-1)	
ATE CLP (dermal)	300 mg/kg bodyweight
ATE CLP (vapours)	3 mg/l/4h

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Potential adverse human health effects and

symptoms

: The hydrolysis product of this compound is methanol.

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : May cause skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : May be harmful if swallowed.

Chronic symptoms : On contact with water this compound liberates methanol which is known to have a chronic

effect on the central nervous system.

Reason for classification : Expert judgment

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified Chronic aquatic toxicity : Not classified

Methanol (67-56-1)			
LC50 fish 1 28200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])			
LC50 fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])		

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Methanol (67-56-1)		
BCF fish 1	< 10	
Log Pow	-0.77	

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to licensed waste disposal facility.

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

14.1. UN number

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1993 UN-No. (IMDG) : 1993

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UN-No. (IATA) : 1993 UN-No. (ADN) : 1993 UN-No. (RID) : 1993

14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, N.O.S.
Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S.
Proper Shipping Name (IATA) : Flammable liquid, n.o.s.
Proper Shipping Name (ADN) : FLAMMABLE LIQUID, N.O.S.
Proper Shipping Name (RID) : FLAMMABLE LIQUID, N.O.S.

Transport document description (ADR) : UN 1993 FLAMMABLE LIQUID, N.O.S. (n-PROPYLDIMETHYLMETHOXYSILANE), 3, III,

(D/E)

Transport document description (IMDG)

: UN 1993 FLAMMABLE LIQUID, N.O.S. (n-PROPYLDIMETHYLMETHOXYSILANE), 3, III

Transport document description (ADN)

: UN 1993 Flammable liquid, n.o.s. (n-PROPYLDIMETHYLMETHOXYSILANE), 3, III

Transport document description (ADN)

: UN 1993 FLAMMABLE LIQUID, N.O.S. (n-PROPYLDIMETHYLMETHOXYSILANE), 3, III

Transport document description (RID)

: UN 1993 FLAMMABLE LIQUID, N.O.S. (n-PROPYLDIMETHYLMETHOXYSILANE), 3, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3



IMDG

Transport hazard class(es) (IMDG)

Danger labels (IMDG)



3

3

IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3



ADN

Transport hazard class(es) (ADN) : 3
Danger labels (ADN) : 3



RID

Transport hazard class(es) (RID) : 3
Danger labels (RID) : 3

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Packing group

Packing group (ADR) : 111 Packing group (IMDG) : 111 : 111 Packing group (IATA) : III Packing group (ADN) Packing group (RID) : 111

14.5. **Environmental hazards**

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1

: 274, 601, 640E Special provisions (ADR)

Limited quantities (ADR) : 51 Excepted quantities (ADR) : E1

: P001, IBC03, LP01, R001 Packing instructions (ADR)

Mixed packing provisions (ADR) : MP19 : T4

Portable tank and bulk container instructions

(ADR)

Portable tank and bulk container special : TP1, TP29

provisions (ADR)

: LGBF Tank code (ADR) Vehicle for tank carriage : FL : 3 Transport category (ADR) Special provisions for carriage - Packages V12

(ADR)

Special provisions for carriage - Operation : S2

(ADR)

Hazard identification number (Kemler No.) : 30

Orange plates

30 1993

Tunnel restriction code (ADR) : D/E

- Transport by sea

Special provisions (IMDG) : 223, 274, 955

Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1 Packing instructions (IMDG) : P001, LP01

IBC packing instructions (IMDG) : IBC03 Tank instructions (IMDG) : T4 : TP1, TP29 Tank special provisions (IMDG) : F-E EmS-No. (Fire) EmS-No. (Spillage) : S-E Stowage category (IMDG) : A

- Air transport

PCA Excepted quantities (IATA) : E1 PCA Limited quantities (IATA) : Y344 PCA limited quantity max net quantity (IATA) : 10L PCA packing instructions (IATA) : 355

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PCA max net quantity (IATA) : 60L
CAO packing instructions (IATA) : 366
CAO max net quantity (IATA) : 220L
Special provisions (IATA) : A3
ERG code (IATA) : 3L

- Inland waterway transport

Classification code (ADN) : F1

Special provisions (ADN) : 274, 601, 640E

Limited quantities (ADN) : 5 L

Excepted quantities (ADN) : E1

Carriage permitted (ADN) : T

Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 0

- Rail transport

Classification code (RID) : F1

Special provisions (RID) : 274, 601, 640E

Limited quantities (RID) : 5L Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions : T4

(RID)

Portable tank and bulk container special : TP1, TP29

provisions (RID)

Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages : W12

(RID)

Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

n-PROPYLDIMETHYLMETHOXYSILANE is not on the REACH Candidate List

n-PROPYLDIMETHYLMETHOXYSILANE is not on the REACH Annex XIV List

n-PROPYLDIMETHYLMETHOXYSILANE is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

n-PROPYLDIMETHYLMETHOXYSILANE is not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

% Volatiles : 100 %

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance) Immission Control Act - 12.BlmSchV

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed NIET-limitatieve lijst van voor de voortplanting : The substance is not listed

giftige stoffen - Borstvoeding

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NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Vruchtbaarheid

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Ontwikkeling

: The substance is not listed

Denmark

Class for fire hazard : Class II-1 Store unit : 5 liter

Classification remarks : R10 <H226;H319>; Emergency management guidelines for the storage of flammable liquids

must be followed

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor

Other information

: Prepared by safety and environmental affairs.

Full text of H- and EUH-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3	
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	
STOT SE 1	Specific target organ toxicity — single exposure, Category 1	
STOT SE 2	Specific target organ toxicity — Single exposure, Category 2	
H225	Highly flammable liquid and vapour.	
H226	Flammable liquid and vapour.	
H301	Toxic if swallowed.	
H311	Toxic in contact with skin.	
H319	Causes serious eye irritation.	
H331	Toxic if inhaled.	
H370	Causes damage to organs.	
H371	May cause damage to organs.	

SDS EU (REACH Annex II) - Custom

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