Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name

2584 Prefill DME

Product code

[2584]



chemius.net/ZH6df

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

Relevant identified uses

Pre-filled can

Uses advised against

No information.

1.3. Details of the supplier of the safety data sheet

Manufacturer

SILCO, D.O.O.

Address: Šentrupert 5 a, 3303 Gomilsko, Slovenia

Phone: +386 3 703 3180 Fax: +386 3 703 3188

E-mail: n.cvilak@silco-automotive.com Point of contact for safety info: Nejc Cvilak

1.4. Emergency telephone number

Emergency

112

<u>Supplier</u>

+386 3 703 3180

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Aerosol 1; H222 Extremely flammable aerosol.

Aerosol 1; H229 Pressurised container: May burst if heated.

Eye Irrit. 2; H319 Causes serious eye irritation.

STOT SE 3; H336 May cause drowsiness or dizziness.

Print date: 23.8.2019 Page 1 of 13

Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



2.2 Label elements

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





Signal word: Danger

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

EUH066 Repeated exposure may cause skin dryness or cracking.

P251 Do not pierce or burn, even after use.

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

P211 Do not spray on an open flame or other ignition source.

P410 + P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F.

P102 Keep out of reach of children.

P271 Use only outdoors or in a well-ventilated area.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

P501 Dispose of contents/container in accordance with national regulation.

2.2.2. Contains:

acetone (CAS: 67-64-1, EC: 200-662-2, Index: 606-001-00-8)

2.2.3. Special provisions

Special hazards are not known or expected.

2.3. Other hazards

No information.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

For mixtures see 3.2.

3.2. Mixtures

Name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	REACH Registration No.
dimethyl ether	115-10-6 204-065-8 603-019-00-8	50-100	Flam. Gas 1; H220		-
acetone	67-64-1 200-662-2 606-001-00-8	25-50	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066		-
butan-1-ol	71-36-3 200-751-6 603-004-00-6	2,5-10	Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335 STOT SE 3; H336		-

Print date: 23.8.2019 Page 2 of 13

Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General notes

Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency.

Following inhalation

Remove patient to fresh air - move out of dangerous area. If victim is not breathing give artificial respiration. If symptoms develop and persist, seek medical attention.

Following skin contact

Take off all contaminated clothing. Wash affected skin areas thoroughly with plenty of water and soap. If symptoms develop and persist, seek medical attention.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation does not stop, seek professional medical treatment!

Following ingestion

Do not induce vomiting! Rinse mouth with water and drink a glass of water by sips! Consult a physician. Show the physician the safety data sheet or label.

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

Inhalation

Vapours may cause drowsiness and dizziness.

Skin contact

Contact with skin may cause irritation (redness, itching). Repeated exposure may cause dry skin or cracked skin.

Eye contact

Redness, tearing, pain.

<u>Ingestion</u>

-

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

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Fire extinguishing powder.

Carbon dioxide (CO₂).

Water spray.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO₂).

Print date: 23.8.2019 Page 3 of 13

Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



5.3. Advice for firefighters

Protective actions

Cool containers at risk with water spray. If possible remove containers from endangered area. Prolonged heating can cause an explosion.

Special protective equipment for firefighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8).

Emergency procedures

Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking! Protect from open fire and other possible sources of ignition.

6.1.2. For emergency responders

-

6.2. Environmental precautions

If accidental large entry into water or ground occurs, inform responsible authorities.

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

.

6.3.2. For cleaning up

Ventilate the permises. Collect the spray cans and hand them over to an authorized waste disposal contractor.

6.3.3. Other information

_

6.4. Reference to other sections

See also Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1. Protective measures

Measures to prevent fire

Ensure adequate ventilation. Keep away from sources of ignition - no smoking. Use spark-proof tools. Take precautionary measures against static discharges. Vapours are heavier than air and spread along floor. Vapours and air form explosive mixtures.

Measures to prevent aerosol and dust generation

-

Measures to protect the environment

-

7.1.2. Advice on general occupational hygiene

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin and eyes. Do not breathe vapours/mist.

Print date: 23.8.2019 Page 4 of 13

Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Technical measures and storage conditions

Keep in cool and well ventilated area. Protect from open fire, heat and direct sunlight. Keep away from food, drink and animal feeding stuffs. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Keep away from flammable substances.

7.2.2. Packaging materials

-

7.2.3. Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking.

7.2.4. Storage class

-

7.2.5. Further information on storage conditions

-

7.3. Specific end use(s)

Recommendations

-

Industrial sector specific solutions

-

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Occupational exposure limit values

Name (CAS)	Limit v	alues	Short-term	exposure limit	Remarks Biological Tolerance Va		
	ml/m ³ (ppm)	mg/m ³	ml/m ³ (ppm)	mg/m ³			
Acetone (67-64-1)	500	1210	1500	3620			
Butan-1-ol (71-36-3)	-	-	50	154	Sk		
Dimethyl ether (115-10-6)	400	766	500	958			
butan-1-ol (71-36-3)	50	150			NDS: Poland		
butan-1-ol (71-36-3)	100	310			TWA, Germany		
butan-1-ol (71-36-3)	100	310			TWA, SI OEL		
butan-1-ol (71-36-3)	50	154			TWA: United Kingdom		
butan-1-ol (71-36-3)	50	150			VME: France		

8.1.2. Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2012+A1:2015 Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values.

8.1.3. DNEL/DMEL values

For components

Name	Туре	Exposure route	Exposure frequency	Value	Remark
acetone (67-64-1)	Worker	inhalation	short term (systemic effects)	1210 mg/m ³	

8.1.4. PNEC values

No information.

Print date: 23.8.2019 Page 5 of 13

Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



8.2. Exposure controls

8.2.1. Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

8.2.2. Personal protective equipment

Eye and face protection

Safety glasses with side protection (EN 166).

Hand protection

Protective gloves (EN 374).

Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345).

Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387).

Thermal hazards

_

8.2.3. Environmental exposure controls

-

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

-	Physical state:	liquid
-	Colour:	colourless
-	Odour:	solvent like

Print date: 23.8.2019 Page 6 of 13

Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



Important health, safety and environmental information

-	рН	No information.
-	Melting point/freezing point	No information.
-	Initial boiling point/boiling range	No information.
-	Flash point	-42 °C (DME)
-	Evaporation rate	No information.
-	Flammability (solid, gas)	235 °C (DME)
-	Explosion limits (vol%)	3 – 18,6 vol %
-	Vapour pressure	No information.
-	Vapour density	No information.
-	Density	Relative density: 0,796 at 20 °C
-	Solubility	Water: Insoluble
-	Partition coefficient	No information.
-	Auto-ignition temperature	No information.
-	Decomposition temperature	No information.
-	Viscosity	No information.
-	Explosive properties	No information.
-	Oxidising properties	No information.

9.2. Other information

- Remarks:

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

-

10.2. Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3. Possibility of hazardous reactions

-

10.4. Conditions to avoid

Protect from heat, direct sunlight, open fire, sparks.

10.5. Incompatible materials

Strong oxidising agents.

Strong acids.

Strong bases.

10.6. Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released. Carbon dioxide; Carbon monoxide.

Print date: 23.8.2019 Page 7 of 13

Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

(a) Acute toxicity

Name	Exposure route	Туре	Species	Time	Value	Method	Remark
acetone (67-64-1)	oral	LD ₅₀	rat		2000 mg/kg		
acetone (67-64-1)	dermal	LD ₅₀	rat		2000 mg/kg		
acetone (67-64-1)	inhalation	LC ₅₀	rat	4 h	20 mg/l		vapour
butan-1-ol (71-36-3)	oral	LD ₅₀	rat		790 mg/kg		
butan-1-ol (71-36-3)	inhalation	LC ₅₀	rat	4 h	24,64 mg/l		vapour
butan-1-ol (71-36-3)	dermal	LD ₅₀	rabbit		3400 mg/kg		

(b) Skin corrosion/irritation

No information.

(c) Serious eye damage/irritation

Name	Species	Time	Result	Method	Remark
For product			Irritating to eyes.		

(d) Respiratory or skin sensitisation

No information.

(e) (Germ cell) mutagenicity

No information.

(f) Carcinogenicity

No information.

(g) Reproductive toxicity

No information.

Summary of evaluation of the CMR properties

No information.

(h) STOT-single exposure

No information.

(i) STOT-repeated exposure

No information.

(i) Aspiration hazard

No information.

Print date: 23.8.2019 Page 8 of 13

Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Acute (short-term) toxicity

For components

Substance (CAS Nr.)	Туре	Value	Exposure time	Species	Organism	Method	Remark
acetone (67-64-1)	EC ₅₀	1000 mg/L	0	crustacea			
	LC ₅₀	1000 mg/L	0	fish			
	LC ₅₀	1000 mg/L	0	algae			
	LC ₅₀	1000 mg/L	0	bacteria			
butan-1-ol (71-36-3)	EC ₅₀	100 mg/L	96 h	crustacea	Daphnia magna	OECD 202	

12.1.2. Chronic (long-term) toxicity

No information.

12.2. Persistence and degradability

12.2.1. Abiotic degradation, physical- and photo-chemical elimination

No information.

12.2.2. Biodegradation

No information.

12.3. Bioaccumulative potential

12.3.1. Partition coefficient

No information.

12.3.2. Bioconcentration factor (BCF)

No information.

12.4. Mobility in soil

12.4.1. Known or predicted distribution to environmental compartments

No information.

12.4.2. Surface tension

No information.

12.4.3. Adsorption/Desorption

No information.

12.5. Results of PBT and vPvB assessment

No evaluation.

12.6. Other adverse effects

No information.

12.7. Additional information

For product

Avoid release to the environment.

This product is not water-soluble.

Print date: 23.8.2019 Page 9 of 13

Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

13.1.1. Product / Packaging disposal

Waste chemical

Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

Waste codes / waste designations according to LoW

16 05 04* - gases in pressure containers (including halons) containing dangerous substances

Packaging

Deliver completely emptied containers to approved waste disposal authorities.

Waste codes / waste designations according to LoW

15 01 10* - packaging containing residues of or contaminated by dangerous substances

13.1.2. Waste treatment-relevant information

_

13.1.3. Sewage disposal-relevant information

-

13.1.4. Other disposal recommendations

-

SECTION 14. TRANSPORT INFORMATION

14.1. UN number

UN 1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2

14.4. Packing group

Not applicable.

14.5. Environmental hazards

NO.

14.6. Special precautions for user

Limited quantities

1 L

Tunnel restriction code

(D)

IMDG flashpoint

-42 °C, c.c.

IMDG EmS

F-D, S-U

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

Goods may not be carried in bulk in bulk containers, containers or vehicles.



Print date: 23.8.2019 Page 10 of 13

Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



SECTION 15. REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2015/830)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.1.1. Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-quideline)

Not applicable.

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16. OTHER INFORMATION

Indication of changes

-

Abbreviations and acronyms

ATE - Acute Toxicity Estimate

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

CEN - European Committee for Standardisation

C&L - Classification and Labelling

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

CAS# - Chemical Abstracts Service number

CMR - Carcinogen, Mutagen, or Reproductive Toxicant

CSA - Chemical Safety Assessment

CSR - Chemical Safety Report

DMEL - Derived Minimal Effect Level

DNEL - Derived No Effect Level

DPD - Dangerous Preparations Directive 1999/45/EC

DSD - Dangerous Substances Directive 67/548/EEC

DU - Downstream User

EC - European Community

ECHA - European Chemicals Agency

EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)

EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)

EEC - European Economic Community

EINECS - European Inventory of Existing Commercial Substances

ELINCS - European List of notified Chemical Substances

EN - European Standard

EQS - Environmental Quality Standard

EU - European Union

Euphrac - European Phrase Catalogue

EWC - European Waste Catalogue (replaced by LoW - see below)

GES - Generic Exposure Scenario

GHS - Globally Harmonized System

IATA - International Air Transport Association

ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air

IMDG - International Maritime Dangerous Goods

IMSBC - International Maritime Solid Bulk Cargoes

IT - Information Technology

IUCLID - International Uniform Chemical Information Database

IUPAC - International Union for Pure Applied Chemistry

JRC - Joint Research Centre

Kow - octanol-water partition coefficient

Print date: 23.8.2019 Page 11 of 13

Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



 ${\rm LC}_{50}$ - Lethal Concentration to 50 % of a test population

LD₅₀ - Lethal Dose to 50% of a test population (Median Lethal Dose)

LE - Legal Entity

LoW - List of Wastes (see http://ec.europa.eu/environment/waste/framework/list.htm)

LR - Lead Registrant

M/I - Manufacturer / Importer

MS - Member States

MSDS - Material Safety Data Sheet

OC - Operational Conditions

OECD - Organization for Economic Co-operation and Development

OEL - Occupational Exposure Limit

OJ - Official Journal

OR - Only Representative

OSHA - European Agency for Safety and Health at work

PBT - Persistent, Bioaccumulative and Toxic substance

PEC - Predicted Effect Concentration

PNEC(s) - Predicted No Effect Concentration(s)

PPE - Personal Protection Equipment

(Q)SAR - Qualitative Structure Activity Relationship

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

RIP - REACH Implementation Project

RMM - Risk Management Measure

SCBA - Self-Contained Breathing Apparatus

SDS - Safety data sheet

SIEF - Substance Information Exchange Forum

SME - Small and Medium sized Enterprises

STOT - Specific Target Organ Toxicity

(STOT) RE - Repeated Exposure

(STOT) SE - Single Exposure

SVHC - Substances of Very High Concern

UN - United Nations

vPvB - Very Persistent and Very Bioaccumulative

Key literature references and sources for data

-

List of relevant H phrases

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.



☑ Provided correct labelling of the product

☑ Compliance with the local legislation

☑ Provided correct classification of the product

☑ Provided adequate transport data

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Print date: 23.8.2019 Page 12 of 13

Product name: 2584 Prefill DME

Creation date: 25.10.2012 · Revision: 27.6.2018 · Version: 1



The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.

Print date: 23.8.2019 Page 13 of 13