

**VELSIFLEX ® 342S** 

Product No: Plasticizer - 002

According to EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP), 2015/830 & 2020/878

Version: 1.0 /UK

Revision date:21 October, 2024

\_\_\_\_\_

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

1.1 Product identifier

Trade name: VELSIFLEX® 342S

Oxydiethylene dibenzoate

UK REACH registration No.: UK-01-0586151530-1-0003

**CAS-Number**: 27138-31-4 **EC-number**: 248-258-5

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

1.2.1 Relevant identified uses

Industrial applications: Plasticizer for adhesives, caulks, flooring and paints.

1.2.2 Uses advised against

No specific uses advised against have been identified.

1.3 Details of the supplier of the safety data sheet

Company name: Velsicol Chemical Ireland Ltd

Charter House

Street/POB-No.: 5 Pembroke Row

Postal Code, city: Dublin 2

Republic of Ireland

WWW: www.velsicol.com
E-mail: sfriedman@velsicol.com
Telephone: 00353 1 477 3143

Telefax: 00353 1 477 3143 Telefax: 00353 1 402 9587

Dept. responsible for information: <a href="mailto:sfriedman@velsicol.com">sfriedman@velsicol.com</a>

1.4 Emergency telephone number

Telephone: +49 51 92 98970 (08:00-17:00 CET)

CHEMTREC, Telephone: +1 703 527 3887 (24h; from USA: 1-800-424-9300)

# **SECTION 2: Hazard(s) identification**

# 2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Chron. 3; H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Signal Word:

No signal word

Pictograms:

No Pictogram

**Hazard statements:** 

H412: Harmful to aquatic life with long lasting effects.

**Precautionary statements** 

P273: Avoid release to the environment

P501: Dispose of contents/container in accordance with local/regional/ national/international regulations

2.3 Other hazards

None known





**VELSIFLEX®342S** 

**Product No: Plasticizer - 002** 

Version: 1.0 /UK

1272/2008 (CLP), 2015/830 & 2020/878

Revision date:21 October, 2024

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

#### 3.1 Substances

| Chemical Name          | Common name and synonyms                 | CAS number  | EC number   | % by Weight        |
|------------------------|------------------------------------------|-------------|-------------|--------------------|
| Oxydipropyl dibenzoate | Dipropylene glycol dibenzoate ,<br>DPGDB | 27138-31-4  |             | Major<br>component |
| Benzoate Esters        | Proprietary                              | Proprietary | Proprietary | Proprietary        |

#### 3.2 Mixtures

Not applicable

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

# 4.1 Description of first aid measures

#### 4.1.1 General information:

Inhalation and skin contact are expected to be the primary routes of occupational exposure to VELSIFLEX® 342S. This material is not expected to cause significant adverse human health effects when used in accordance with good industrial hygiene and safety practices are followed.

Chronic health effects: None known.

Carcinogenic status: Not listed or regulated by IARC, NTP, OSHA, or ACGIH.

None Expected.Reproductive effects:

See Section 11 for toxicological information.

#### 4.1.2 Following inhalation:

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Seek medical attention if symptoms occur.

## 4.1.3 Following skin contact:

Flush the area with plenty of water. Remove material from clothing. Wash clothing before reuse.

#### 4.1.4 Following eye contact:

Flush with plenty of water. Seek medical attention if irritation persists.

## 4.1.5 Following ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Get medical attention. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

### 4.1.6 Self-protection of the first aider:

Wear protective gloves/protective clothing/eye protection/face protection if possible. Do not get in eyes, on skin, or on clothing. Contaminated work clothing should not be allowed out of the workplace. Get medical attention immediately.

# 4.1.7 Notes for the doctor

Not available.

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

May cause eye and skin irritation. High airborne concentrations of vapors resulting from heating, misting or spraying may cause irritation of the respiratory tract and mucous membranes.

# 4.3 Indication of any immediate medical attention and special treatments needed None known.

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

#### 5.1 Extinguishing media

Flammability Properties: Non-flammable liquid. Closed container may rupture (due to build up in pressure) when exposed to extreme heat.

VELSICOL

**VELSIFLEX ® 342S** 

**Product No: Plasticizer - 002** 

According to EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP), 2015/830 & 2020/878

Version: 1.0 /UK

Revision date:21 October, 2024

Suitable extinguishing medie: Lies dry chemicale, CO2, water appay or form

Suitable extinguishing media: Use dry chemicals, CO2, water spray or foam. Unsuitable extinguishing media: Do not use water jet

# 5.2 Special hazards arising from the substance or mixture

Products of combustion are carbon oxides (CO, CO2).

## 5.3 Advice for fire fighters

Firefighters and others who may be exposed to products of combustion should wear full firefighting turn out gear and self-contained breathing apparatus. Firefighting equipment should be thoroughly decontaminated after use.

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

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

#### 6.1.1. For non-emergency personnel

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing; Removal of ignition sources, provision of sufficient ventilation; Evacuate the danger area or to consult an expert.

#### 6.1.2. For emergency personnel

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing; Ventilate the area involved.

# 6.2 Environmental precautions

Do not allow to enter sewers / surface or ground water.

In case of spillage to water course or public sewers inform responsible authorities.

## 6.3 Methods and materials for containment and clearing up

Small Spill - Absorb with an inert material and place in an appropriate waste disposal container.

Large Spill - Stop the leak if possible. Remove all ignition sources. Ventilate the area involved. Absorb with an inert material and put the spilled material in an appropriate waste disposal container.

#### 6.4 References to other sections

See sections 8 and 13 for further advice.

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

## 7.1 Precautions for safe handling

**Protective measures:** Do not handle until all safety precautions have been read and understood; Wear suitable protective clothing, gloves and eye/face protection.

**Measures to prevent aerosol and dust generation:** Provide ventilation if necessary to minimize exposure. Do not breathe dust/fumes/gas/mist/vapours/spray;

**Measures to protect the environment:** Avoid release to the environment.

**Advice on general occupational hygiene:** Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin, and clothing. Keep away from sources of ignition.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in well ventilated area away from sources of ignition; Keep container tightly closed. Keep away from heat, sparks and open flames.

Storage Temperatures: 38 °F to 150 °F; and shelf life: 2 years.

# 7.3 Specific end uses(s)

Plasticizer products will soften plastic materials and as a result they should not be transported in piping systems constructed from these materials.



**VELSIFLEX ® 342S** 

Product No: Plasticizer - 002

According to EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP), 2015/830 & 2020/878

Version: 1.0 /UK

Revision date:21 October, 2024

# **SECTION 8. Exposure controls/personal protection**

## 8.1 Control parameters

## 8.1.1 The national occupational exposure limit values

No national limits have been set for Occupational Exposure Limit values of this product..

# 8.1.2 Recommended monitoring procedures

N/A

#### 8.1.3 Air contaminants occupational exposure limit values

N/A

#### 8.1.4 The relevant DNELs and PNECs

N/A

#### 8.2 Exposure controls

Ventilation must be adequate to maintain the ambient workplace atmosphere.

#### 8.2.1 Appropriate engineering controls:

Always provide effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation.

#### 8.2.2 Personal protective equipment:

Do not eat, drink, or smoke whilst working. Keep away from foodstuffs, beverages and feed. Remove all contaminated clothing. Wash hands before breaks and at the end of work.

#### Respiratory protection

Respiratory protection is not needed with proper ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

#### **Hand Protection**

Chemical resistant coveralls, gloves and boot covers. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.

#### Eye and face protection

Safety glasses should be worn when handling this substance.

# Skin protection

Aprons or coveralls are recommended. These should be changed after use or if contaminated.

## 8.3 Environmental exposure controls:

Avoid release to the environment.

Environmental release category (ERC): ERC 2: Formulation of preparations

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

#### 9.1 Information on basic physical and chemical properties

**Appearance:** Clear, Colorless liquid, free of particulates

Odour: Mild ester-like
Odour threshold: Not available
Bulk Density: Not available
pH: Not available

Melting/Freezing point: -40°C
Pour point: -19°C

**Boiling point:** 232°C @ 5 mm Hg Flashpoint: 199°C (COC)

**Evaporation rate:** Lower than 1 compared to Butyl acetate.

**Flammability:** Not flammable upon contact with air/water, not pyrophoric

**Vapor pressure:** 1.2 E-06 mmHg at 25°C

Vapour density: 11.8 (Air = 1)

**Specific Gravity:** 1.120-1.125 g/cm3 at 25°C / 25°C



According to EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP), 2015/830 & 2020/878

# **VELSIFLEX®342S**

Product No: Plasticizer - 002

Version: 1.0 /UK

Revision date:21 October, 2024

**Refractive index:** 1.5282 at 25°C **Solubility in water:** Negligible

Solubility in other solvents: Easily soluble in methanol, diethyl ether, and acetone.

Surface tension: Not available Partition coefficient: Not available

Volatile by weight <3%

**Auto ignition temperature:** Not <400°C (752°F) at 760 mm Hg

**Decomposition temperature:** Not available

Viscosity 120 cps, Brookfield @ 25°C
Explosive properties Not considered to be explosive
Oxidising properties Not considered to be oxidising

Dissociation Constant: Not available Molecular Weight Not available

#### 9.2 Other information

Some of the number specified above are typical values and do not represent a specification.

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Not a reactive substance and no reactive hazards are expected.

#### 10.2 Chemical stability

This substance is stable.

#### 10.3 Possibility of hazardous reactions

No hazardous reactions expected under normal conditions of use.

#### 10.4 Conditions to avoid

Excessive heat and ignition sources.

#### 10.5 Incompatible materials

Slightly reactive to reactive with oxidizing agents, acids and alkalis.

#### 10.6 Hazardous decomposition products

Carbon dioxide, carbon monoxide and hydrocarbons.

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Velsicol Chemical LLC has not conducted toxicity tests on VELSIFLEX® 342S. However, toxicity data are available on the components of this material.

Not classified (based on available data, the classification criteria are not met).

#### Acute toxicity

DPGDB: The acute median lethal oral doses (LD50) to male and female rats were calculated to be: 5072 mg/kg bodyweight (males), 3295 mg/kg bodyweight (females), and 3914 mg/kg bodyweight (both sexes).

DPGDB: No deaths were seen in rats exposed to a 200 mg/L atmosphere in air for four hours.

The acute lethal dermal dose to rats was demonstrated to be greater than 2000 mg/kg body weight.

#### Skin corrosion/irritation

DPGDB is not irritating to the skin and is not considered to be a primary skin irritant.

#### Serious eye damage/irritation

DPGDB is not irritants to the eye.

#### Respiratory/skin sensitisation

DPGDB did not produce evidence of skin sensitization (delayed contact hypersensitivity) in any of the animals tested.

## Germ cell mutagenicity



# **VELSIFLEX ® 342S**

Product No: Plasticizer - 002

According to EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP), 2015/830 & 2020/878

Version: 1.0 /UK

Revision date:21 October, 2024

DPGDB showed no evidence of mutagenic activity in this bacterial system.

## Carcinogenicity

Not classified (No data available).

#### Reproductive toxicity

A dietary concentration of dipropylene glycol dibenzoate (DPGDB) at 10000 ppm should be considered as the No-Observed-Effect-Level (NOEL) for parent animals. The No-Observed-Adverse-Effect-Level (NOAEL) for survival and growth of the offspring is considered to be 10000 ppm.

## STOT-single exposure

Not classified (No data available).

### STOT-repeated exposure

The NOAEL is 1000 mg/kg bw/day

#### Aspiration hazard

Not classified (No data available).

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Velsicol Chemical LLC has not conducted toxicity tests on VELSIFLEX® 342S. However, toxicity data are available on the components of this material.

Classification: Aquatic Chronic 3, H412: harmful to aquatic life with long lasting effects.

No observed effect level: 1000 ppm, earthworm. EC50: > 10 mg/l, Bacteria (Pseudomonas putida)
The EL50 (Area under the curve 72 h) was 1.1 mg/L and the EL50 (Growth rate 0-72 h was 4.9 mg/L while the EL50 (Area under the curve 96 h) was 0.95 mg/L and the EL50 (Growth rate 0-96 h) was 3.6 mg/L.

# 12.2 Persistence and degradability

DPGDB is readily biodegradable and therefore is not a persistence.

#### 12.3 Bio-accumulative potential

QSAR data suggests that DPGDB is not bio-accumulative.

## 12.4 Mobility in soil

No specific information available

### 12.5 Results of PBT and vPvB assessment

DPGDB is not PBT or vPvB based upon experimental data.

### 12.6 Other adverse effects

No information available.

# SECTION 13: Disposal considerations

# 13.1. Waste treatment methods

#### **Product**

Recycle to process, if possible.

Dispose of waste in accordance with local/regional/national/international regulation.

## Contaminated packaging

Dispose of waste in accordance with local/regional/national/international regulation.

# **SECTION 14: Transport information**

# 14.1 UN number

Not applicable

#### 14.2 UN proper shipping name

ADR/RID, IMDG, IATA: Not restricted



**VELSIFLEX ® 342S** 

Product No: Plasticizer - 002

According to EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP), 2015/830 & 2020/878

Version: 1.0 /UK

Revision date:21 October, 2024

## 14.3 Transport hazard class(es)

Not applicable

# 14.4 Packing group

Not applicable

#### 14.5 Environmental hazards

Marine pollutant - IMDG: No

#### 14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

## 14.7 Maritime transport in bulk according to IMO instruments

No data available

#### 14.8 Harmonized Tariff Schedule

HTS#: 2916.31.90

# **SECTION 15: Regulatory information**

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

All chemical substances in this material are included on or exempted from listing on the following inventories: Australia (AICS), Canada (DSL), China (IECSC), Europe (ELNECS 248-258-5), Japan (ENCS (3)-1390), Mexico (INSQ), Korea (KECI KE-27719), New Zealand (NZIoC), Philippines (PICCS), & United States (TSCA)

EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP), 2015/830 & 2020/878

**UK REACH Regulation:** 

The retained version of the EU REACH Regulation is referred to as the UK REACH Regulation.

National regulations - EC member states

Not known.

# 15.2 Chemical Safety Assessment

None

# **SECTION 16: Other information**

# 16.1 Indication of changes

July, 2016: This is the first SDS according to Regulation (EC) No. 1907/2006 and Regulation (EU) No 453/2010 (REACH)

16 January 2017: Update section 2 on Signal Word: No signal word

19 May, 2017: Update section 1, REACH pre-registration number.

16 May, 2018: Update section 2 to remove Aquatic Chronic, category 3 classifications

09 April, 2019: update information in Section 1 and 16, and formatting.

02 June, 2022: Updated Section 9

03 February, 2023, Updated Section 2, 12, 13, 14, 15 and 16.

02 April 2024, Updated Section 1,15, 16, as UK SDS version 1.

21 October, 2024, updated sections 16.2 and minor format corrections.

#### 16.2 Key literature references and sources for data

Information on Chemicals, ECHA website: http://echa.europa.eu/information-on-chemicals

Ariel WebInsight, 3E Company.com

Product Data Sheet and SDS information from manufacturer.

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

# 16.3 Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Not applicable



# **VELSIFLEX ® 342S**

UK SAFETY DATA SHEET According to EC-REGULATIONS 1907/2006 (REACH),

1272/2008 (CLP), 2015/830 & 2020/878

Product No: Plasticizer - 002

Version: 1.0 /UK Revision date:21 October, 2024

16.4 List of relevant hazard statements and/or precautionary statements which are not written out in

full under Sections 2 to 15

Not available

16.5 **Contact Information** 

> Technical or Product Support Information, contact: SDS or Regulatory information, contact:

> > Sherman Friedman

Velsicol Chemical LLC

10400 W. Higgins Road

Phone: +1 847 635 3486

Rosemont, IL 60018 U.S.A.

Dawei Li

Velsicol Chemical LLC 1199 Warford Street Memphis, TN 38108

Phone: +1 901 323 6226, ext. 124

dli@velsicol.com Email: sfriedman @velsicol.com

16.6 Further information: Notice to Reader

> The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.