

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Supersedes date 29-Nov-2022

Revision date 30-Dec-2024

Revision Number 5

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

1.1. Product identifier

Product Code(s) 53237
Safety data sheet number 53237
Product Name DOWFAX 20B102 NONIONIC SURFACTANT
Synonyms DOWFAX 20B102
Pure substance/mixture Mixture

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

Recommended use Multi-purpose surfactant.

1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com
Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Chronic aquatic toxicity	Category 3 - (H412)
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2.2. Label elements

Hazard statements

H412 - Harmful to aquatic life with long lasting effects

Precautionary statements

P273 - Avoid release to the environment

P501 - Dispose of contents/ container to an approved waste disposal plant

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

2.3. Other hazards

In case of spills, beware of slippery floors and surfaces.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures

The product contains no substances which at their given concentration, are considered to be hazardous to health

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
LINEAR FATTY ALCOHOL C12-16, ETHOXYLATED, BUTOXYLATED 1301637-43-3	> 94.0 %	-	-	Aquatic Chronic 3 (H412)	-	-	-
WATER 7732-18-5	< 6.0 %	231-791-2	-	Not classified	-	-	-
POLYETHYLENE GLYCOL 25322-68-3	<= 1.0 %	500-038-2	-	Not Classified	-	-	-

Full text of H- and EUH-phrases: see section 16This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (UK REACH Article 59)**SECTION 4: First aid measures****4.1. Description of first aid measures****General advice**

First aid personnel should wear appropriate protective equipment during any rescue. Use personal protection recommended in Section 8.

Inhalation

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Get medical attention if symptoms occur.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.

Skin contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. Get medical attention if symptoms occur.

Ingestion

Rinse mouth thoroughly with water. Do NOT induce vomiting. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed**Symptoms****Eyes**

May cause slight eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed**Note to doctors**

Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable Extinguishing Media**

Dry chemical, CO₂, alcohol-resistant foam or water spray.

Large Fire

CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media

Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture**Specific hazards arising from the chemical**

When heated and in case of fire, toxic vapours/gases may be formed. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids..

Hazardous combustion products

Carbon oxides.

5.3. Advice for firefighters**Special protective equipment and precautions for fire-fighters**

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****Personal precautions**

Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with skin, eyes and inhalation of vapours. Evacuate personnel to safe areas.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions**Environmental precautions**

See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up**Methods for containment**

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Absorb with earth, sand or other non-combustible material and transfer to containers for

later disposal. Pick up and transfer to properly labelled containers. Do not use water to clean up.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with skin, eyes and inhalation of vapours. Wash skin thoroughly after handling.

General hygiene considerations Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Specific use(s)

See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
POLYETHYLENE GLYCOL 25322-68-3		112 mg/kg bw/day [4] [6]	40.2 mg/m ³ [4] [6]

[4] Systemic health effects.

[6] Long term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
POLYETHYLENE GLYCOL	40 mg/kg bw/day [4] [6]		7.14 mg/m ³ [4] [6]

Chemical name	Oral	Dermal	Inhalation
25322-68-3			

[4] Systemic health effects.
[6] Long term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
POLYETHYLENE GLYCOL 25322-68-3	0.273 g/L	1 mg/L	27.3 mg/L	0.1 mg/L	

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
POLYETHYLENE GLYCOL 25322-68-3	1030 mg/kg sediment dw	103 mg/kg sediment dw		46.4 mg/kg soil dw	

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

Hand protection Wear suitable gloves. Gloves must conform to standard EN 374.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
	Wear protective Neoprene™ gloves	> 0.35 mm	> 120 minutes
	Nitrile/butadiene rubber ("nitrile" or "NBR").	> 0.35 mm	> 120 minutes
	Polyvinyl chloride (PVC)	> 0.35 mm	> 120 minutes

Skin and body protection Wear appropriate clothing to prevent reasonably probable skin contact.

Respiratory protection Use appropriate respiratory protection.
Organic gases and vapours filter conforming to EN 14387. Type AP2.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state Liquid
Appearance Liquid
Colour Colourless

Odour Odourless.
Odour threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		Not applicable.
Initial boiling point and boiling range		Decomposes before melting.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	> 100 °C	Closed cup. (ASTM D93).
Autoignition temperature		No information available.
Decomposition temperature		No information available.
pH	5.0 - 8.0	
pH (as aqueous solution)		No information available.
Kinematic viscosity	78 cSt	@ 25 °C.
Dynamic viscosity		No information available.
Water solubility	Soluble in water > 100 g/l @ 25 °C	Calculation method.
Solubility(ies)		No information available.
Partition coefficient		Not determined.
Vapour pressure	< 0.10 kPa	@ 20 °C. Calculation method.
Relative density	1.003	25 °C / 25 °C. Calculation method.
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		No information available.
Particle characteristics		Not applicable. liquid.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	No information available	
Oxidising properties	No information available	

9.2. Other information

Pour Point -8 °C ASTM D97

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerisation Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Conditions to avoid Product may decompose at elevated temperatures.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Information on likely routes of exposure****Product Information**

Inhalation Inhalation of dust in high concentration may cause irritation of respiratory system.

Eye contact May cause slight eye irritation.

Skin contact Brief contact may cause slight skin irritation with local redness.

Ingestion May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics**Symptoms****Acute toxicity****Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 Oral LD50 > 2000 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
LINEAR FATTY ALCOHOL C12-16, ETHOXYLATED, BUTOXYLATED	> 2000 mg/kg (Rat)	-	-
POLYETHYLENE GLYCOL	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rat)	> 2.5 mg/l (Rat) (6h)

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Brief contact may cause slight skin irritation with local redness.

LINEAR FATTY ALCOHOL C12-16, ETHOXYLATED, BUTOXYLATED (1301637-43-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Brief contact may cause slight skin irritation with local redness.

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Prolonged exposure

					not likely to cause significant skin irritation. May cause more severe response if skin is abraded (scratched or cut).
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Serious eye damage/eye irritation May cause slight eye irritation.

LINEAR FATTY ALCOHOL C12-16, ETHOXYLATED, BUTOXYLATED (1301637-43-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause slight eye irritation

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause temporary eye irritation Corneal injury is unlikely

Respiratory or skin sensitisation Not a skin sensitiser.

LINEAR FATTY ALCOHOL C12-16, ETHOXYLATED, BUTOXYLATED (1301637-43-3)

Method	Species	Exposure route	Results
	Human evidence	Dermal	Not a skin sensitiser

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	Not a skin sensitiser
	Human evidence	Dermal	Negative

Germ cell mutagenicity Not mutagenic.

Product Information		
Method	Species	Results
	in vitro	Negative

Component Information

LINEAR FATTY ALCOHOL C12-16, ETHOXYLATED, BUTOXYLATED (1301637-43-3)

Method	Species	Results
	in vitro	Negative

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Results
	in vitro	Negative
		Negative Did not show mutagenic effects in animal experiments

Carcinogenicity No information available.

Component Information

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Results
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		Did not cause cancer in laboratory animals.
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Reproductive toxicity No information available.

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Results
		This product does not contain any known or suspected reproductive hazards

STOT - single exposure No information available.

LINEAR FATTY ALCOHOL C12-16, ETHOXYLATED, BUTOXYLATED (1301637-43-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Evaluation of available data suggests that this material is not an STOT-SE toxicant

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Evaluation of available data suggests that this material is not an STOT-SE toxicant

STOT - repeated exposure No information available.

Component Information

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, repeated exposures are not anticipated to cause significant adverse effects Recent findings of kidney failure and death in burn patients, as well as some studies using animal burn models, suggest that polyethylene glycol may have been a factor. The use of topical applications containing this material may not be appropriate in severely burned

					patients.
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Aspiration hazard Based on available data the classification criteria are not met.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test or Equivalent.	Poecilia reticulata	LC50	2.26 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test or Equivalent.	Daphnia magna	EC50	3.42 mg/L	48 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Desmodesmus subspicatus	ErC50	1.25 mg/L	72 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test or Equivalent.	Desmodesmus subspicatus	NOEC	0.375 mg/L	72 hours	
	Pseudomonas putida		21000 mg/L		

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Pimephales promelas	LC50	58900 mg/L	96 hours	
	Daphnia magna	EC50	22100 mg/L	48 hours	
	Bacteria toxicity	EC50	> 10000 mg/L	16 hours	

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable.

Method	Exposure time	Value	Results
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F) or Equivalent.	28 days	Biodegradation > 60 %	Readily biodegradable

POLYETHYLENE GLYCOL (25322-68-3)

Method	Exposure time	Value	Results
OECD Test No. 301B: Ready Biodegradability: CO2 Evolution Test (TG 301 B)	28 days	Biodegradation 90 %	Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation Not likely to bioaccumulate.

12.4. Mobility in soil

Mobility in soil Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
POLYETHYLENE GLYCOL	The substance is not PBT / vPvB

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number Not regulated
 14.2
 14.3 Transport hazard class(es) Not regulated
 14.4 Packing group Not regulated
 14.5 Environmental hazards No
 14.6 Special precautions for user
 Special Provisions None

IMDG

14.1 UN number or ID number Not regulated
 14.3 Transport hazard class(es) Not regulated
 14.4 Packing group Not regulated
 14.5 Environmental hazards No
 14.6 Special precautions for user
 Special Provisions None
 14.7 Maritime transport in bulk according to IMO instruments No information available

RID

14.1 UN number or ID number Not regulated
 14.2 UN proper shipping name Not regulated
 14.3 Transport hazard class(es) Not regulated
 14.4 Packing group Not regulated
 14.5 Environmental hazards No
 14.6 Special precautions for user
 Special Provisions None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Authorisations and/or restrictions on use:**

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).
This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECI	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIRC - Australian Inventory of Industrial Chemicals

NZIOC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report

No Chemical Safety Assessment has been carried out for this substance/mixture

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Revision Note **SDS sections updated 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16**

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
 European Chemicals Agency (ECHA) (ECHA_API)
 Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEGLS)
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)

U.S. National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Prepared By Lisa Bland

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This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet