SAFETY DATA SHEET

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

Supercedes date 19-Dec-2022*** **Revision date** 10-Sep-2023 **Revision Number** 4

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

1.1. Product identifier

Product Code(s) 56710***

Safety data sheet number 56710***

Product Name DOWSIL ES 5226 FORMULATION AID

Synonyms DOWSIL ES 5226 DM FORMULATION AID, DOW CORNING ES 5226 DM FORMULATION AID***

Pure substance/mixture Substance***

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

Recommended use Cosmetics***

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)***

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***

2.3. Other hazards

Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air. Avoid contact with:. Water. Alcohols. Acidic. Bases. Oxidising Agent.***

SECTION 3: Composition/information on ingredients

3.1 Substances***

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)
OCTAMETHYLCYCLOTETRASILOXANE*** 556-67-2	<= 0.047 %	209-136-7 (014-018-00-1)***	-	Flam. Liq. 3 (H226) Aquatic Chronic 1 (H410) Repr. 2 (H361f)***	-	-	10***

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration >= 0.1% (UK REACH Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice 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 without medical advice. Get medical attention if symptoms occur.***

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

Eyes May cause temporary eye irritation.***

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

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Alcohol resistant foam. Carbon dioxide (CO2). 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. Dry chemical.***

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. Flash back possible over considerable distance. Closed containers can burst violently when heated, due to excess pressure build-up. Fire burns more vigorously than would be expected. Vapours may form explosive mixtures with air.***

Hazardous combustion products Carbon oxides. Silicon oxides. Formaldehyde.***

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. Remove all sources of ignition.***

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 Use non-sparking tools. Suppress (knock down) gases/vapours/mists with a water spray jet. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air. Avoid contact with:. Water. Acidic. Bases. Alcohols. Oxidising Agent.***

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. Keep container closed when not in use. Protect from moisture. Water. Remove all sources of ignition. Take precautionary measures against static discharge. Avoid release to the environment. Handle in accordance with good industrial hygiene and safety practice. Empty containers retain product residue and can be hazardous.***

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. Keep in properly labelled containers. Keep container closed when not in use. This product slowly evolves hydrogen on storage. Closed containers can burst violently when heated, due to excess pressure build-up. Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with:. Strong oxidising agents.***

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
OCTAMETHYLCYCLOTETRASILOXANE*** 556-67-2			73 mg/m³ [4] [6] 73 mg/m³ [5] [6]***

[4] Systemic health effects.***
[5] Local health effects.***
[6] Long term.***

Derived No Effect Level (DNEL) - General Public ***

Chemical name	Oral	Dermal	Inhalation
OCTAMETHYLCYCLOTETRASILOXA	3.7 mg/kg bw/day [4] [6]***		13 mg/m³ [4] [6]

Chemical name	Oral	Dermal	Inhalation
NE*** 556-67-2			13 mg/m³ [5] [6]***

[4] Systemic health effects.***
[5] Local health effects.***
[6] Long term.***

Predicted No Effect Concentration (PNEC) ***

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
OCTAMETHYLCYCLOTETRASILOXANE*** 556-67-2	0.0015 mg/l***		0.00015 mg/l***		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
OCTAMETHYLCYCLOTETRASILOXANE*** 556-67-2	3 mg/kg sediment dw***	0.3 mg/kg sediment dw***	10 mg/L***	0.54 mg/kg soil dw***	41 mg/kg food***

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 butyl rubber gloves***	> 0.35 mm***	> 60 minutes***
	Rubber (natural, latex)***	> 0.35 mm***	> 60 minutes***
	Wear protective Neoprene™ gloves***	> 0.35 mm***	> 60 minutes***
	Wear protective nitrile rubber gloves***	> 0.35 mm***	> 60 minutes***
	Polyvinyl chloride (PVC)***	> 0.35 mm***	> 60 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 A.***

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid***
Appearance	Liquid***
Colour	Grey white To Milky., White***
Odour	Characteristic.***
Odour threshold	No information available

Property	**Values**	**Remarks • Method**
Melting point / freezing point		No information available
Initial boiling point and boiling range	>*** 35*** °C***	@ 760 mmHg***
Flammability		No information available
Flammability Limit in Air		No information available
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	78*** °C***	Pensky-Martens closed cup***
Autoignition temperature		No information available
Decomposition temperature		No information available
pH		No information available
pH (as aqueous solution)		No information available
Kinematic viscosity	5000*** mm²/s***	@ 25 °C***
Dynamic viscosity		No information available
Water solubility	Not determined***	***
Solubility(ies)		No information available
Partition coefficient		Not determined***
Vapour pressure		No information available
Relative density	0.91***	***
Bulk density		
		Relative vapour density
No information available		**Particle characteristics**
Not applicable***		**Particle Size**
		Particle Size Distribution

Explosive properties	Not considered to be explosive***
Oxidising properties	Does not meet the criteria for classification as oxidising***

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No known effects under normal use conditions.***

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 The following materials may react with the product:. Strong oxidising agents. Vapours may

form explosive mixtures with air. Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air. Avoid contact with:. Water. Alcohols. Acidic. Bases. Oxidising Agent. Metals. Hazardous decomposition products will be formed at elevated temperatures.***

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks. Protect from moisture.***

10.5. Incompatible materials

Incompatible materials Strong oxidising agents.***

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Silicon oxides. Formaldehyde.***

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation Inhalation of vapours in high concentration may cause irritation of respiratory system.***

Eye contact May cause temporary eye irritation.***

Skin contact Non-irritating during normal use.***

Ingestion Gastrointestinal discomfort.***

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity
***

ATEmix (oral) > 2000*** mg/kg***
ATEmix (dermal) > 2000*** mg/kg***

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
OCTAMETHYLCYCLOTETRASILOXANE***	> 4800 mg/kg (Rat) ***	> 2400 mg/kg (Rabbit)***	= 36 mg/L (Rat) 4 h***

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

Skin corrosion/irritation Non-irritating during normal use.***

Serious eye damage/eye irritation May cause temporary eye irritation.***

Respiratory or skin sensitisation Based on available data the classification criteria are not met.***

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

Method	Species	Exposure route	Results
	Guinea pig***	Dermal***	Not a skin sensitiser***

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

Chemical name	United Kingdom
OCTAMETHYLCYCLOTETRASILOXANE***	Repr. 2***

STOT - single exposure No information available.

STOT - repeated exposure No information available.

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.***

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Oncorhynchus mykiss (rainbow trout)***	LC50***	> 0.022 mg/L***	96 hours***	
	Cyprinodon variegatus***	LC50***	> 0.0063 mg/L***	14 days***	
	Mysidopsis bahia***	EC50***	> 0.0091 mg/L***	96 hours***	
	Daphnia magna***	EC50***	> 0.015 mg/L***	48 hours***	
	Pseudokirchneriella subcapitata***	ErC50***	> 0.022 mg/L***	96 hours***	
	Pseudokirchneriella subcapitata***	EC10***	>= 0.022 mg/L***	96 hours***	
Chronic aquatic toxicity***	Oncorhynchus mykiss (rainbow trout)***	NOEC***	>= 0.0044 mg/L***	93 days***	
Chronic aquatic toxicity***	Daphnia magna***	NOEC***	0.0079 mg/L***	21 days***	

12.2. Persistence and degradability

Persistence and degradability No information available.***

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

Method	Exposure time	Value	Results
OECD 310***	28 days***	Biodegradation 3.7%***	Expected to biodegrade very slowly***

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Chemical name	Partition coefficient
OCTAMETHYLCYCLOTETRASILOXANE***	6.49***

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product contains substance(s) classified as PBT or vPvB.***

Chemical name	PBT and vPvB assessment
OCTAMETHYLCYCLOTETRASILOXANE***	PBT substance vPvB substance***

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 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

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).***

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
OCTAMETHYLCYCLOTETRASILOXANE*** - 556-67-2	Use restricted. See item 70.***	-

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/NDSL	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

KECL	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/NDSL - 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
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

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 ***Indicates updated data since last publication

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)

EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
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)
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***

Supercedes date 19-Dec-2022***

Revision date 10-Sep-2023

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