

SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by
UK REACH Regulations SI 2019/758

VIRKON S FOG ENHANCER



Version	Revision Date:	SDS Number:	Date of last issue: 18.07.2018
2.0	19.01.2022	103000008481	Country / Language: GB / EN(GB)

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

1.1 Product identifier

Trade name : VIRKON S FOG ENHANCER

Product code : 57804471

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

Use of the Sub-
stance/Mixture : Additive

1.3 Details of the supplier of the safety data sheet

Supplier : Antec International Limited
Windham Road
Chilton Industrial Estate
CO10 2XD Sudbury / Suffolk, United Kingdom

Telephone : +4922188852288

E-mail address of person
responsible for the SDS : infosds@lanxess.com

1.4 Emergency telephone number

+442038850382 mention CCN1001748

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (GB CLP)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (GB CLP)

Not a hazardous substance or mixture.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mixture, from, glycols

SAFETY DATA SHEET

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VIRKON S FOG ENHANCER



Version 2.0	Revision Date: 19.01.2022	SDS Number: 103000008481	Date of last issue: 18.07.2018 Country / Language: GB / EN(GB)
----------------	------------------------------	-----------------------------	---

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Substances with a workplace exposure limit :			
propane-1,2-diol	57-55-6 200-338-0		>= 90 - <= 100

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Remove contact lenses.
Protect unharmed eye.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide

SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by
UK REACH Regulations SI 2019/758

VIRKON S FOG ENHANCER



Version	Revision Date:	SDS Number:	Date of last issue: 18.07.2018
2.0	19.01.2022	103000008481	Country / Language: GB / EN(GB)

5.3 Advice for firefighters

Special protective equipment : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.2 Environmental precautions

Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.
For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : General industrial hygiene practice.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Strong acids Oxidizing agents

Electrical installations / working materials must comply with the technological safety standards.

Advice on common storage : No materials to be especially mentioned.

Further information on storage stability : No decomposition if stored and applied as directed.

SAFETY DATA SHEET

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VIRKON S FOG ENHANCER



Version	Revision Date:	SDS Number:	Date of last issue: 18.07.2018
2.0	19.01.2022	103000008481	Country / Language: GB / EN(GB)

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
propane-1,2-diol	57-55-6	TWA (particles)	10 mg/m ³	GB EH40
		TWA (Total vapour and particles)	150 ppm 474 mg/m ³	GB EH40

8.2 Exposure controls

Engineering measures

This information is not available.

Personal protective equipment

Eye protection : Tightly fitting safety goggles

Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Hand protection

Material : Polychloroprene - CR
Wearing time : < 60 min

Material : Nitrile rubber - NBR
Wearing time : < 60 min

Material : Polyvinyl chloride - PVC
Wearing time : < 60 min

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves. After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations

Skin and body protection : Wear suitable protective clothing.

Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

SAFETY DATA SHEET

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UK REACH Regulations SI 2019/758

VIRKON S FOG ENHANCER



Version 2.0	Revision Date: 19.01.2022	SDS Number: 103000008481	Date of last issue: 18.07.2018 Country / Language: GB / EN(GB)
----------------	------------------------------	-----------------------------	---

Filter type : Recommended Filter type:
Combined inorganic and acidic gas/vapour, ammonia/amines
and organic vapour type (ABEK)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: Liquid, clear
Colour	: colourless
Odour	: odourless
Odour Threshold	: No data available
pH	: 7 - 10 Concentration: 100 %
Melting point/freezing point	: No data available
Boiling point/boiling range	: No data available
Flash point	: > 100 °C Method: closed cup
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: 1.05 g/cm ³ (20 °C)
Solubility(ies) Water solubility	: soluble
Partition coefficient: n- octanol/water	: No data available
Ignition temperature	: No data available
Decomposition temperature	: No data available

SAFETY DATA SHEET

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VIRKON S FOG ENHANCER



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Viscosity : No data available

Explosive properties : No data available

Oxidizing properties : No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
Stable under recommended storage conditions.
No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid : Heat

10.5 Incompatible materials

Materials to avoid : Incompatible with strong acids and oxidizing agents.

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.

Components:

propane-1,2-diol:

Acute oral toxicity : LD50 (Rat, male and female): 22,000 mg/kg

Acute inhalation toxicity : LC50 (Rabbit): > 317 mg/l
Exposure time: 2 h
Test atmosphere: dust/mist

SAFETY DATA SHEET

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UK REACH Regulations SI 2019/758

VIRKON S FOG ENHANCER



Version	Revision Date:	SDS Number:	Date of last issue: 18.07.2018
2.0	19.01.2022	103000008481	Country / Language: GB / EN(GB)

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Not classified based on available information.

Components:

propane-1,2-diol:

Species: Rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
Result: No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Components:

propane-1,2-diol:

Species: Rabbit
Method: OECD Test Guideline 405
Result: No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

propane-1,2-diol:

Exposure routes: Skin contact
Species: Mouse
Method: OECD Test Guideline 429
Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components:

propane-1,2-diol:

Genotoxicity in vitro : Test system: Bacteria
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by
UK REACH Regulations SI 2019/758

VIRKON S FOG ENHANCER



Version	Revision Date:	SDS Number:	Date of last issue: 18.07.2018
2.0	19.01.2022	103000008481	Country / Language: GB / EN(GB)

Test system: Human lymphocytes
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Genotoxicity in vivo : Test Type: dominant lethal test
Species: Mammalian-Animal
Application Route: Oral
Method: OECD Test Guideline 478
Result: negative

Carcinogenicity

Not classified based on available information.

Components:

propane-1,2-diol:

Species: Rat, (male and female)
Application Route: Oral
Exposure time: 2 Years
Result: negative

Reproductive toxicity

Not classified based on available information.

Components:

propane-1,2-diol:

Effects on fertility : Species: Rabbit, female
Application Route: Oral
Dose: 1230 milligram per kilogram
Duration of Single Treatment: 18 d
Symptoms: No observed adverse effect concentration

Species: Rat, female
Application Route: Oral
Dose: 1600 milligram per kilogram
Duration of Single Treatment: 15 d
Symptoms: No observed adverse effect concentration

Effects on foetal development : Species: Rabbit, female
Application Route: Oral
Dose: 1230 milligram per kilogram
Duration of Single Treatment: 18 d
Result: No teratogenic potential

Species: Rat, female
Application Route: Oral
Dose: 1600 milligram per kilogram
Duration of Single Treatment: 15 d
Result: No teratogenic potential

SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by
UK REACH Regulations SI 2019/758

VIRKON S FOG ENHANCER



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2.0	19.01.2022	103000008481	Country / Language: GB / EN(GB)

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

propane-1,2-diol:

Species: Rat, male
NOAEL: 1,700 mg/kg
Application Route: Oral
Exposure time: 2 yr
Number of exposures: 7 days/week
Remarks: Chronic toxicity

Species: Rat, female
NOAEL: 2,100 mg/kg
Application Route: Oral
Exposure time: 2 yr
Number of exposures: 7 days/week
Remarks: Chronic toxicity

Species: Rat, male
NOAEL: 2.2 mg/l
Application Route: Inhalation
Test atmosphere: dust/mist
Exposure time: 90 d
Number of exposures: 6 hours/day
Method: OECD Test Guideline 413
Remarks: Subchronic toxicity

Species: Rat, female
NOAEL: 1 mg/l
Application Route: Inhalation
Test atmosphere: dust/mist
Exposure time: 90 d
Number of exposures: 6 hours/day
Method: OECD Test Guideline 413
Remarks: Subchronic toxicity

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: No toxicology information is available.
According to our experience and information the product has no harmful effects on health if properly handled.

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UK REACH Regulations SI 2019/758

VIRKON S FOG ENHANCER



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SECTION 12: Ecological information

12.1 Toxicity

Components:

propane-1,2-diol:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 40,613 mg/l End point: mortality Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Ceriodaphnia dubia (Water flea)): 18,340 mg/l Exposure time: 48 h
Toxicity to algae	:	ErC50 (Pseudokirchneriella subcapitata (microalgae)): 19,000 mg/l End point: Growth rate Exposure time: 96 h
Toxicity to microorganisms	:	NOEC (Pseudomonas putida): > 20,000 mg/l Exposure time: 18 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 13,020 mg/l Exposure time: 7 Days Species: Ceriodaphnia dubia (Water flea)

12.2 Persistence and degradability

Components:

propane-1,2-diol:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 87 - 92 % Exposure time: 28 d Method: OECD Test Guideline 301C
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12.3 Bioaccumulative potential

Components:

propane-1,2-diol:

Bioaccumulation	:	Bioconcentration factor (BCF): < 100
Partition coefficient: n-octanol/water	:	Pow: 0.085 (20.5 °C) log Pow: -1.07 (20.5 °C) pH: 6.2 - 6.4 Method: Regulation (EC) No. 440/2008, Annex, A.8

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UK REACH Regulations SI 2019/758

VIRKON S FOG ENHANCER



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12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information : Ecotoxicological data are not available.
No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Hazard statements : Not dangerous cargo.
Keep separated from foodstuffs.

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

Not applicable for product as supplied.

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SECTION 15: Regulatory information

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

International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors	: Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).
REACH - List of substances subject to authorisation (Annex XIV)	: Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	: Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	: Not applicable
Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors.	: Neither banned nor restricted
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	: Not applicable
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	: Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	Not applicable

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

Full text of other abbreviations

GB EH40	: UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA	: Long-term exposure limit (8-hour TWA reference period)

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals

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VIRKON S FOG ENHANCER



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Further information

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet and its Annex [if required according to Regulation (EC) 1907/2006 (REACH)] is to describe the products in terms of their safety requirements. The given details do not imply any guarantee concerning the composition, properties or performance.