

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

1.1. Product identifier

Product Name GRF73 GRANGERS WASH + REPEL CLOTHING 2 IN 1

Safety data sheet number 06397

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

Recommended use Garment care product

Uses advised against

1.3. Details of the supplier of the safety data sheet

Manufacturer

Grangers International Ltd
Enterprise Way
Duckmanton
Derbyshire
S44 5FD
United Kingdom

EU Authorised Representative:
Authorised Rep Compliance Ltd
Ground Floor, 71 Lower Baggot Street
Dublin
DO2 P593
Ireland
For further information, please contact

E-mail address info@grangersinternational.co.uk

1.4. Emergency telephone number

Emergency Telephone TEL: +44 (0) 1773 521521 IRELAND TEL: 00353 15133758

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

2.2. Label elements

Hazard statements

Precautionary Statements - EU (§28, 1272/2008)

P102 - Keep out of reach of children.

2.3. Other hazards

No information available.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
WATER 7732-18-5	50 - <100%		231-791-2	
Synthetic polymer 75718-16-0	1 - <2.5%			Eye Irrit. 2 (H319) Skin Irrit. 2 (H315)
Isotridecanol, ethoxylated 9043-30-5	0.5 - <1%		500-027-2	Aquatic Chronic 3 (H412) Eye Dam. 1 (H318)
propane-1,2-diol 57-55-6	0.5 - <1%		200-338-0	
pyridine-2-thiol 1-oxide, sodium salt 3811-73-2	<0.025%		(613-344-00-7) 223-296-5	Aquatic Chronic 2 (H411) Aquatic Acute 1 (H400) Acute Tox. 2 (H330) Acute Tox. 4 (H302) Eye Dam. 1 (H318)
1,2-benzisothiazol-3(2H)-one 2634-33-5	<0.025%		(613-088-00-6) 220-120-9	Aquatic Chronic 2 (H411) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Acute Tox. 2 (H330) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)
(Z)-octadec-9-enylamine, ethoxylat-ed 26635-93-8	<0.025%			Skin Corr. 1B (H314) Aquatic Chronic 1 (H410) Aquatic Acute 1 (H400) Acute Tox. 4 (H302) Eye Dam. 1 (H318)

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

Acute Toxicity Estimate

No information available

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
WATER 7732-18-5	89838.9	No data available	No data available	No data available	No data available
Isotridecanol, ethoxylated 9043-30-5	1000	No data available	No data available	No data available	No data available
propane-1,2-diol 57-55-6	20000	20800	No data available	No data available	No data available

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
pyridine-2-thiol 1-oxide, sodium salt 3811-73-2	500+	790+ 1800	0.5+	No data available	No data available
1,2-benzisothiazol-3(2H)-one 2634-33-5	1020	2000	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.

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

Symptoms	No information available.
Effects of Exposure	See Section 11 for additional Toxicological Information.

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

Note to physicians	Treat symptomatically.
---------------------------	------------------------

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	No information available.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	No information available.
---	---------------------------

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters No information available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No information available.

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 Take up mechanically, placing in appropriate containers for disposal.

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 No information available.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container closed when not in use.

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.

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
propane-1,2-diol 57-55-6	-	-	-	-	TWA: 150 ppm TWA: 474 mg/m ³ TWA: 10 mg/m ³
pyridine-2-thiol 1-oxide, sodium salt 3811-73-2	-	TWA: 1 mg/m ³ STEL 4 mg/m ³ H*	-	-	-
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
pyridine-2-thiol 1-oxide, sodium salt 3811-73-2	-	-	TWA: 1 mg/m ³ H* STEL: 2 mg/m ³	-	-
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
pyridine-2-thiol 1-oxide, sodium salt 3811-73-2	-	TWA: 0.2 mg/m ³ H*	TWA: 0.2 mg/m ³ Peak: 0.4 mg/m ³ *	-	-
1,2-benzisothiazol-3(2H)-o ne 2634-33-5	-	-	skin sensitizer	-	-
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
propane-1,2-diol 57-55-6	TWA: 10 mg/m ³ TWA: 150 ppm TWA: 470 mg/m ³ STEL: 1410 mg/m ³ STEL: 30 mg/m ³ STEL: 450 ppm	-	-	TWA: 7 mg/m ³	TWA: 7 mg/m ³
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
propane-1,2-diol 57-55-6	-	-	-	TWA: 25 ppm TWA: 79 mg/m ³ STEL: 37.5 ppm STEL: 118.5 mg/m ³	TWA: 100 mg/m ³
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
pyridine-2-thiol 1-oxide, sodium salt 3811-73-2	-	-	-	TWA: 1 mg/m ³ STEL: 2 mg/m ³ K*	-
Chemical name	Sweden		Switzerland		United Kingdom
propane-1,2-diol 57-55-6	-		-		TWA: 150 ppm TWA: 474 mg/m ³ TWA: 10 mg/m ³ STEL: 450 ppm STEL: 1422 mg/m ³ STEL: 30 mg/m ³
pyridine-2-thiol 1-oxide, sodium salt 3811-73-2	-		TWA: 0.2 mg/m ³ STEL: 0.4 mg/m ³ H*		-

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 No information available

Chemical name	Oral	Dermal	Inhalation
propane-1,2-diol	-	-	168 mg/m ³ [4] [6]

Chemical name	Oral	Dermal	Inhalation
57-55-6			10 mg/m ³ [5] [6]
1,2-benzisothiazol-3(2H)-one 2634-33-5	-	0.966 mg/kg bw/day [4] [6]	6.81 mg/m ³ [4] [6]
(Z)-octadec-9-enylamine, ethoxylat-ed 26635-93-8	-	0.3 mg/kg bw/day [4] [6]	2.112 mg/m ³ [4] [6]

Derived No Effect Level (DNEL) - General Public No information available.

Chemical name	Oral	Dermal	Inhalation
propane-1,2-diol 57-55-6	-	-	50 mg/m ³ [4] [6] 10 mg/m ³ [5] [6]
1,2-benzisothiazol-3(2H)-one 2634-33-5	-	-	1.2 mg/m ³ [4] [6]
(Z)-octadec-9-enylamine, ethoxylat-ed 26635-93-8	0.214 mg/kg bw/day [4] [6]	-	0.745 mg/m ³ [4] [6]

Predicted No Effect Concentration (PNEC) No information available.

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
propane-1,2-diol 57-55-6	260 mg/L	183 mg/L	26 mg/L	-	-
1,2-benzisothiazol-3(2H)-one 2634-33-5	4.03 µg/L	1.1 µg/L	0.403 µg/L	110 ng/L	-
(Z)-octadec-9-enylamine, ethoxylat-ed 26635-93-8	0.214 µg/L	0.87 µg/L	0.0214 µg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
propane-1,2-diol 57-55-6	572 mg/kg sediment dw	57.2 mg/kg sediment dw	20000 mg/L	50 mg/kg soil dw	-
1,2-benzisothiazol-3(2H)-one 2634-33-5	49.9 µg/kg sediment dw	4.99 µg/kg sediment dw	1.03 mg/L	3 mg/kg soil dw	-
(Z)-octadec-9-enylamine, ethoxylat-ed 26635-93-8	1.692 mg/kg sediment dw	0.1692 mg/kg sediment dw	1500 µg/L	5 mg/kg soil dw	2 mg/kg food

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection No special protective equipment required.

Hand protection	No special protective equipment required.
Skin and body protection	Appropriate skin and body protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Color	white
Odor	Slight. Characteristic.
Odor threshold	

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	100	100°C/212°F
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
pH	No data available	pH (concentrated solution): 5.00 @ 21°C (+/- 1.00)
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Water solubility	No data available	Soluble in water
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapor pressure	No data available	None known
Relative density	~ 1.00 @ 21°C	None known
Bulk density	No data available	
Liquid Density	No data available	
Relative vapor density	No data available	None known
Particle characteristics		
Particle Size		
Particle Size Distribution		

9.2. Other information

9.2.1. Information with regard to physical hazard classes
Not applicable

9.2.2. Other safety characteristics

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.

10.4. Conditions to avoid

Conditions to avoid Do not freeze.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact May cause irritation. Specific test data for the substance or mixture is not available.

Skin contact May cause irritation. Specific test data for the substance or mixture is not available.

Ingestion May cause irritation. Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

No information available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
WATER	> 90 mL/kg (Rat)	-	-
Isotridecanol, ethoxylated	= 1000 mg/kg (Rat)	-	-
propane-1,2-diol	= 20 g/kg (Rat)	= 20800 mg/kg (Rabbit)	-
pyridine-2-thiol 1-oxide, sodium salt	-	= 1800 mg/kg (Rabbit)	-
1,2-benzisothiazol-3(2H)-one	= 1020 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity The environmental impact of this product has not been fully investigated.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
propane-1,2-diol	EC50: =19000mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =51600mg/L (96h, Oncorhynchus mykiss) LC50: 41 - 47mL/L (96h, Oncorhynchus mykiss) LC50: =51400mg/L (96h, Pimephales promelas) LC50: =710mg/L (96h, Pimephales promelas)	-	EC50: >1000mg/L (48h, Daphnia magna)
pyridine-2-thiol 1-oxide, sodium salt	-	-	-	EC50: =0.022mg/L (48h, water flea)

12.2. Persistence and degradability

Persistence and degradability

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Chemical name	Partition coefficient
propane-1,2-diol	-1.07
pyridine-2-thiol 1-oxide, sodium salt	-2.38
1,2-benzisothiazol-3(2H)-one	0.99

12.4. Mobility in soil

Mobility in soil

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 above the threshold of declaration.

Chemical name	PBT and vPvB assessment
propane-1,2-diol	The substance is not PBT / vPvB PBT assessment does not apply
1,2-benzisothiazol-3(2H)-one	The substance is not PBT / vPvB
(Z)-octadec-9-enylamine, ethoxylat-ed	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

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 No information available.

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 Not applicable
14.6 Special precautions for user
Special Provisions None

IMDG

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 Not applicable
14.6 Special precautions for user
Special Provisions None
14.7 Maritime transport in bulk
according to IMO instruments

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 Not applicable
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 Not applicable
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

Chemical name	French RG number
propane-1,2-diol - 57-55-6	RG 84
1,2-benzisothiazol-3(2H)-one - 2634-33-5	RG 65

European Union

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.

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
pyridine-2-thiol 1-oxide, sodium salt - 3811-73-2	75.	-
1,2-benzisothiazol-3(2H)-one - 2634-33-5	75.	-

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
pyridine-2-thiol 1-oxide, sodium salt - 3811-73-2	Product-type 2: Disinfectants and algacides not intended for direct application to humans or animals Product-type 6: Preservatives for products during storage Product-type 7: Film preservatives Product-type 9: Fiber, leather, rubber and polymerized materials preservatives Product-type 10: Construction material preservatives Product-type 13: Working or cutting fluid preservatives
1,2-benzisothiazol-3(2H)-one - 2634-33-5	Product-type 2: Disinfectants and algacides not intended for direct application to humans or animals Product-type 6: Preservatives for products during storage Product-type 9: Fiber, leather, rubber and polymerized materials preservatives Product-type 11: Preservatives for liquid-cooling and processing systems Product-type 12: Slimecides Product-type 13: Working or cutting fluid preservatives

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

Full text of H-Statements referred to under section 3

H315 - Causes skin irritation

H319 - Causes serious eye irritation

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average)

Ceiling Maximum limit value

+ Sensitizers

STEL

Sk*

STEL (Short Term Exposure Limit)

Skin designation

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)

Australia 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)

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

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

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

World Health Organization

Prepared By Technical Department

Revision date 06/20/2024

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

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