Dura - Go-Flush

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8
Issue date: 5/26/2023 Version: 1.0

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

1.1. GHS product identifier

Product form	:	Mixture
Trade name	:	Dura - Go-Flush
Type of product	:	Cleaning agent
Product code	:	GOFLU
Product group	:	Trade product

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture	:	Cleaning agent to be used in conjunction with Go-Line Marking Equipment

1.4. Supplier's details

Manufacturer
Dura Paints (Pty) Ltd.
5 Wakefield Road; Founders View South.
P.O. Box 303
1610 Edenvale; Johannesburg – South Africa
T 011 452 5221
Contact: Lizel Rosemann

1.5. Emergency phone number

Emergency number	:	079 494 2731 / 011 452 5221

SECTION 2: Hazard identification

2.1. GHS classification of the substance/mixture and any national or regional information

Classification according to the United Nations GHS

Flammable liquids, Category 2	H225
Acute toxicity (oral), Category 4	H302
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity – Repeated exposure, Category 2	H373
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects	:	Highly flammable liquid and vapour,May cause damage to organs through prolonged or repeated exposure,May cause drowsiness or dizziness,Harmful if swallowed,Causes skin irritation,Causes serious eye damage,Toxic to aquatic life with long lasting effects.

2.2. GHS label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA) :

Signal word (GHS-ZA)	:	Danger
Hazardous ingredients	:	Ethelyne Glycol (Regular); 2-butylaminoethanol; Propan-2-ol; Butan-2-ol; Nonylphenol polyethylene glycol ether ; nonylphenol ethoxylate

Hazard statements (GHS ZA)	:	H225 - Highly flammable liquid and vapour H302 - Harmful if swallowed H315 - Causes skin irritation H318 - Causes serious eye damage H336 - May cause drowsiness or dizziness H373 - May cause damage to organs (kidneys, respiratory system) through prolonged or repeated exposure (Oral, Inhalation) H411 - Toxic to aquatic life with long lasting effects
Precautionary statements (GHS ZA)	:	P102 - Keep out of reach of children. P103 - Read carefully and follow all instructions. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing dust, mist, vapours. P273 - Avoid release to the environment. P319 - Get medical help if you feel unwell. P501 - Dispose of container to recycling.

2.3. Other hazards which do not result in classification or are not covered by the GHS

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to the United Nations GHS
Nonylphenol polyethylene glycol ether ; nonylphenol ethoxylate	CAS-No.: 9016-45-9	12 – 28	Flam. Liq. Not classified Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411
Ethelyne Glycol (Regular)	CAS-No.: 107-21-1	11 – 22	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Propan-2-ol	CAS-No.: 67-63-0	8.5 – 21.25	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Eye Irrit. 2, H319 STOT SE 3, H336
2-butylaminoethanol	CAS-No.: 111-75-1	0.99 – 4.95	Flam. Liq. Not classified Acute Tox. 4 (Oral), H302 Skin Corr. 1, H314 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE Not classified
Butan-2-ol	CAS-No.: 78-92-2	1.06 – 2.65	Flam. Liq. 3, H226 Eye Irrit. 2, H319 STOT SE 3, H336 STOT SE 3, H335 Aquatic Acute Not classified

SECTION 4: First aid measures

4.1. Description of necessary first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effect, acute and delayed

Symptoms/effects : May cause drowsiness or dizziness.
Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Serious damage to eyes.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapour.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethelyne Glycol (Regular) (107-21-1)	
South Africa - Occupational Exposure Limits (Restricted Limits)	
Local name	Ethylene glycol
OEL eight hour TWA	20 mg/m³ (H: aerosol only)
RHCA - STEL/C	50 mg/m³ (V: vapour fraction) 100 mg/m³ (V: vapour fraction)
Remark	SKIN (danger of cutaneous absorption)
Regulatory reference	Government Notice No. R. 280, 2021
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Ethylene glycol (Ethane-1,2-diol; 1,2-Dihydroxyethane)
OEL TWA	20 mg/m³
OEL STEL	40 mg/m³
Regulatory reference	Government Notice No. R 904

Propan-2-ol (67-63-0)	
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Isopropyl alcohol (Propan-2-ol)
OEL TWA	980 mg/m³
OEL TWA [ppm]	400 ppm
OEL STEL	1225 mg/m³
OEL STEL [ppm]	500 ppm
Regulatory reference	Government Notice No. R 904
South Africa - Biological limit values	
Local name	2-Propanol
BEI	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B (background), Ns (non-specific)
Regulatory reference	Government Notice No. R. 280, 2021

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection : Protective gloves
Eye protection : Safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment
Personal protective equipment symbol(s)

8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	No data available
Colour	:	No data available
Odour	:	No data available
Odour threshold	:	No data available
pH	:	No data available
pH solution	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability	:	Highly flammable liquid and vapour.
Vapour pressure	:	No data available
Vapour pressure at 50°C	:	No data available
Relative vapour density at 20°C	:	No data available
Relative density	:	No data available
Relative density of saturated gas/air mixture	:	No data available
Density	:	No data available
Relative gas density	:	No data available
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Partition coefficient n-octanol/water (Log Kow)	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available
Lower explosion limit	:	No data available
Upper explosion limit	:	No data available
Physical state	:	Liquid
Appearance	:	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10: Stability and Reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Dura - Go-Flush	
ATE ZA (oral)	951.39 mg/kg bodyweight

Ethelyne Glycol (Regular) (107-21-1)	
LD50 oral rat	6000 – 13000 mg/kg Source: Supplier SDS
LD50 dermal rabbit	> 2270 mg/kg Source: Supplier SDS
LC50 Inhalation - Rat	> 3.95 mg/l Source: Supplier SDS

2-butylaminoethanol (111-75-1)	
LD50 oral rat	892 – 1310 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:

Propan-2-ol (67-63-0)	
LD50 oral rat	5840 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

Butan-2-ol (78-92-2)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Nonylphenol polyethylene glycol ether ; nonylphenol ethoxylate (9016-45-9)	
LD50 dermal rabbit	2000 mg/kg Source: HSDB

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause drowsiness or dizziness.

2-butylaminoethanol (111-75-1)	
STOT-single exposure	May cause respiratory irritation.

Propan-2-ol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.

Butan-2-ol (78-92-2)	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.

STOT-repeated exposure : May cause damage to organs (kidneys, respiratory system) through prolonged or repeated exposure (Oral, Inhalation).

Ethelyne Glycol (Regular) (107-21-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

2-butylaminoethanol (111-75-1)	
NOAEL (oral, rat, 90 days)	240 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Toxic to aquatic life with long lasting effects.

Ethelyne Glycol (Regular) (107-21-1)	
LC50 - Fish [1]	≈ 51000 mg/l Source: Supplier SDS
LC50 - Fish [2]	≈ 27540 (≤ 0) mg/l Source: Supplier SDS
EC50 - Crustacea [1]	46300 – 51100 mg/l Source: Supplier SDS
EC50 72h - Algae [1]	9500 – 13000 mg/l Source: Supplier SDS
NOEC chronic fish	≈ 15.38 g/l Source: ECHA
NOEC chronic crustacea	7.5 – 15 g/l Period: 21 days; Source: ECHA
NOEC chronic algae	≈ 100 mg/l Period: 72 hours; Source: ECHA

2-butylaminoethanol (111-75-1)	
LC50 - Fish [1]	≈ 100 mg/l Test organisms (species): Leuciscus idus
LC50 - Fish [2]	> 100 mg/l Test organisms (species): Leuciscus idus
EC50 - Crustacea [1]	180 mg/l Test organisms (species): Daphnia magna

Butan-2-ol (78-92-2)	
LC50 - Fish [1]	2993 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	308 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	1972 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

Butan-2-ol (78-92-2)	
EC50 96h - Algae [1]	2029 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

Nonylphenol polyethylene glycol ether ; nonylphenol ethoxylate (9016-45-9)	
LC50 - Fish [1]	4.7 mg/l Source: HSDB

12.2. Persistence and degradability

Dura - Go-Flush	
Persistence and degradability	No additional information available

12.3. Bioaccumulative potential

Dura - Go-Flush	
Bioaccumulative potential	No additional information available

Ethelyne Glycol (Regular) (107-21-1)	
Bioconcentration factor (BCF REACH)	< 100
Partition coefficient n-octanol/water (Log Kow)	≈ -1.36

Nonylphenol polyethylene glycol ether ; nonylphenol ethoxylate (9016-45-9)	
Partition coefficient n-octanol/water (Log Kow)	3.7 Source: ECHA

12.4. Mobility in soil

Dura - Go-Flush	
Mobility in soil	No additional information available

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal Considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
1219	1219	1219
14.2. UN Proper Shipping Name		
ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)	Isopropanol
14.3. Transport hazard class(es)		
3	3	3

SANS	IMDG	IATA
		
14.4. Packing group, if applicable		
II	II	II
14.5. Environmental hazards		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available		

14.6. Special precautions for user

SANS

Limited quantities (SANS)	:	1 L
Limited quantities (SANS)	:	1 L
Packagings, large packagings and IBCs Packing instructions (SANS)	:	P001, IBC02
Portable tank and bulk containers instructions (SANS)	:	T4
Portable tank and bulk container special provisions (SANS)	:	TP1

IMDG

Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1
EmS-No. (Fire)	:	F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	:	S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	:	B
Flash point (IMDG)	:	12°C c.c.
Properties and observations (IMDG)	:	Colourless, mobile liquid. Flashpoint: 12°C c.c. Explosive limits: 2% to 12% Miscible with water.

IATA

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y341
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	353
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	364
CAO max net quantity (IATA)	:	60L
Special provisions (IATA)	:	A180
ERG code (IATA)	:	3L

14.7. Transport in bulk according to IMO instructions

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

Issue date : 26/05/2023

Full text of H-statements:	
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), South Africa (HCA)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.