SAFETY DATA SHEET

GLADIATOR

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

1.1. Product identifier

Product name GLADIATOR

Product number DXGT01/01

Internal identification C218

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

Identified uses Cleaning agent.

1.3. Details of the supplier of the safety data sheet

Supplier

ARROW SOLUTIONS
RAWDON ROAD
MOIRA
SWADLINCOTE
DERBYSHIRE
DE12 6DA
TEL: +44 (0)1283 221044
FAX: +44 (0)1283 225731
sales@arrowchem.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 777 8505 330

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards
Not Classified

Health hazards
Eye Dam. 1 - H318 Asp. Tox. 1 - H304

Environmental hazards
Aquatic Chronic 3 - H412

Classification (67/548/EEC or 1999/45/EC)
Xn;R65. Xi;R36. R52/53,R66.

2.2. Label elements

Pictogram


Signal word Danger

Hazard statements

H304 May be fatal if swallowed and enters airways.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331 Do NOT induce vomiting.
P501 Dispose of contents/container in accordance with national regulations.

Supplemental label information

EUH066 Repeated exposure may cause skin dryness or cracking.

Contains Hydrocarbons, C11-14, n-alkanes,cyclic, <2% aromatics, Amides, C8-18 (even numbers) and C18-unsatd, N,N-bis(hydroxyethyl)

Detergent labelling ≥ 30% aliphatic hydrocarbons, 5 - < 15% non-ionic surfactants, < 5% perfumes, Contains LINALOOL, BENZYL SALICYLATE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hydrocarbons, C11-14, n-alkanes,cyclic, <2% aromatics **30-60%**

CAS number: — **EC number:** 926-141-6 **REACH registration number:** 01-2119456620-43-xxxx

Classification	Classification (67/548/EEC or 1999/45/EC)
Asp. Tox. 1 - H304	Xn;R65. R66.

Amides, C8-18 (even numbers) and C18-unsatd, N,N-bis(hydroxyethyl) **5-10%**

CAS number: 68155-07-7 **EC number:** 931-329-6 **REACH registration number:** 01-2119490100-53-xxxx

Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 2 - H411	Xi;R38,R41.

GLYCERINE **<1%**

CAS number: 56-81-5 **EC number:** 200-289-5 **REACH registration number:** 01-2119471987-18-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Not Classified	-

DIETHANOLAMINE **<1%**

CAS number: 111-42-2 **EC number:** 203-868-0 **REACH registration number:** 01-2119488930-28-xxxx

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT RE 2 - H373	Xn;R22,R48/22 Xi;R38,R41

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The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Ingestion

Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention immediately.

Skin contact

Rinse with water.

Eye contact

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.

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

Inhalation

Coughing, chest tightness, feeling of chest pressure.

Ingestion

Aspiration hazard if swallowed. May be fatal if swallowed and enters airways.

Skin contact

Repeated exposure may cause skin dryness or cracking.

Eye contact

Causes serious eye damage.

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

Notes for the doctor

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguish with the following media: Foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx).

5.3. Advice for firefighters

Protective actions during firefighting

No specific firefighting precautions known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid contact with skin, eyes and clothing. Do not touch or walk into spilled material. Provide adequate ventilation. Take care as floors and other surfaces may become slippery. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Environmental precautions

Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

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Methods for cleaning up

Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Provide adequate ventilation. Take care as floors and other surfaces may become slippery. Do not touch or walk into spilled material. Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Wear protective clothing, gloves, eye and face protection. Provide adequate ventilation. Avoid contact with skin and eyes. Do not breathe vapour/spray. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store at temperatures between 4°C and 40°C.

Storage class

Chemical storage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Hydrocarbons, C11-14, n-alkanes,cyclic, <2% aromatics

Long-term exposure limit (8-hour TWA): WEL 1000 mg/m3

GLYCERINE

Long-term exposure limit (8-hour TWA): WEL 10 mg/m3

DIETHANOLAMINE

Long-term exposure limit (8-hour TWA): WEL 3 ppm 13 mg/m3

WEL = Workplace Exposure Limit

Fatty acids, C16-C18 and C18-unsatd., Me esters (CAS: 67762-38-3)

DNEL	Professional - Inhalation; Long term systemic effects: 6.93 mg/m3 Professional - Dermal; Long term systemic effects: 10 mg/kg/day Consumer - Inhalation; Long term systemic effects: 23 mg/m3 Consumer - Oral; Long term systemic effects: 5 mg/kg/day Consumer - Dermal; Long term systemic effects: 5 mg/kg/day
PNEC	- Fresh water; 2.504 mg/l - water; Intermittent release 25.04 mg/l - Marine water; 0.2504 mg/l - STP; 520 mg/l

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Amides, C8-18 (even numbers) and C18-unsatd, N,N-bis(hydroxyethyl) (CAS: 68155-07-7)

DNEL	Industry - Dermal; Long term systemic effects: 4.16 mg/kg/day Industry - Inhalation; Long term systemic effects: 73.4 mg/m³ Consumer - Dermal; Long term systemic effects: 2.5 mg/kg/day Consumer - Inhalation; Long term systemic effects: 21.73 mg/m³ Consumer - Oral; Long term systemic effects: 6.25 mg/kg/day
PNEC	- Fresh water; 0.007 mg/l - Marine water; 0.0007 mg/l - Intermittent release; 0.0024 mg/l - STP; 830 mg/l - Soil; 0.0189 mg/l - Sediment; 0.0424 mg/kg

METHYL UNDECYLENATE (CAS: 111-81-09)

DNEL	Workers - Inhalation; Short term local effects: 179.4 mg/m³ Workers - Inhalation; Long term systemic effects: 4.23 mg/m³ Workers - Dermal; Long term systemic effects: 0.6 mg/kg Consumer - Inhalation; Long term systemic effects: 1.04 mg/m³ Consumer - Inhalation; Short term local effects: 89.7 mg/m³ Consumer - Oral; Long term systemic effects: mg/kg Consumer - Dermal; Long term systemic effects: mg/kg/day
PNEC	- Intermittent release; mg/l

GLYCERINE (CAS: 56-81-5)

DNEL	Workers - Inhalation; Long term local effects: 56 mg/m³ General population - Inhalation; Long term local effects: 33 mg/m³ General population - Oral; Long term systemic effects: 229 mg/kg/day
PNEC	- Fresh water; 0.885 mg/l - Marine water; 0.0885 mg/l - Intermittent release; 8.85 mg/l - STP; 1000 mg/l - Sediment (Freshwater); 3.3 mg/kg - Sediment (Marinewater); 0.33 mg/kg - Soil; 0.141 mg/kg

DIETHANOLAMINE (CAS: 111-42-2)

DNEL	Workers - Inhalation; Long term local effects: 1.0 mg/m3 Workers - Dermal; Long term systemic effects: 0.13 mg/kg/day General population - Inhalation; Long term local effects: 0.25 mg/m³ General population - Dermal; Long term systemic effects: 0.07 mg/kg/day General population - Oral; Long term systemic effects: 0.06 mg/kg/day
PNEC	- Fresh water; 0.0022 mg/l - Marine water; 0.00022 mg/l - Intermittent release; 0.022 mg/l - STP; 100 mg/l - Sediment (Freshwater); 0.012 mg/kg - Sediment (Marinewater); 0.0012 mg/kg - Soil; 0.0011 mg/kg

8.2. Exposure controls

Protective equipment


Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC).

Hygiene measures

Wash hands after handling.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Liquid.

Colour

Amber.

Odour

Characteristic.

pH

Not applicable.

Flash point

65°C CC (Closed cup).

Relative density

0.85 @ 20°C

Solubility(ies)

Forms an emulsion with water.

Viscosity

Kinematic viscosity ≤ 20.5 mm²/s.

9.2. Other information

Other information

Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability

Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Not determined.

10.4. Conditions to avoid

There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid

No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx).

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Aspiration hazard

May be fatal if swallowed and enters airways. Kinematic viscosity ≤ 20.5 mm²/s. Aspiration hazard if swallowed.

Inhalation

Coughing, chest tightness, feeling of chest pressure.

Ingestion

Aspiration hazard if swallowed. May be fatal if swallowed and enters airways.

Skin contact

Repeated exposure may cause skin dryness or cracking.

Eye contact

Causes serious eye damage.

Toxicological information on ingredients.

Hydrocarbons, C11-14, n-alkanes,cyclic, <2% aromatics

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)

5,000.0

Species

Rat

ATE oral (mg/kg)

5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)

5000.0

Species

Rabbit

ATE dermal (mg/kg)

5000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)

5001.0

Species

Rat

ATE inhalation (vapours mg/l)

5001.0

Inhalation

Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.

Ingestion

May cause discomfort if swallowed.

Skin contact

Liquid may irritate skin.

Eye contact

Vapour or spray in the eyes may cause irritation and smarting.

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Fatty acids, C16-C18 and C18-unsatd., Me esters

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)

2,001.0

Species

Rat

ATE oral (mg/kg)

2,001.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)

2001.0

Species

Rat

ATE dermal (mg/kg)

2001.0

Reproductive toxicity

Reproductive toxicity - fertility

Fertility: - NOAEL 1000 mg/kg, Oral, Rat

DIETHANOLAMINE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)

780.0

Species

Rat

ATE oral (mg/kg)

780.0

Skin sensitisation

Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro

: Negative.

SECTION 12: Ecological Information

Ecotoxicity

Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Acute toxicity - fish

Not determined.

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Ecological information on ingredients.

Hydrocarbons, C11-14, n-alkanes,cyclic, <2% aromatics

Acute toxicity - fish

LC50, 96 hours: > 1000 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates

EC_{50}, 48 hours: > 1000 mg/l, Daphnia magna EC_{50}, 48 hours: >250ppm mg/l, Daphnia magna

Acute toxicity - aquatic plants

IC_{50}, 72 hours: 20ppm mg/l, Algae

Amides, C8-18 (even numbers) and C18-unsatd, N,N-bis(hydroxyethyl)

Acute toxicity - aquatic invertebrates

EC_{50}, : 3.2 mg/l, Daphnia magna

Acute toxicity - aquatic plants

IC_{50}, : 3.9 mg/l,

Chronic toxicity - aquatic invertebrates

NOEC, 21 days: 0.07 mg/l, Daphnia magna

DIETHANOLAMINE

Acute toxicity - fish

LC50, 96 hours: > 100 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates

EC_{50}, 48 hours: > 10 - 100 mg/l, Daphnia magna

Chronic toxicity - aquatic invertebrates

NOEC, 21 days: 0.78 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability

The product is expected to be biodegradable.

Ecological information on ingredients.

Hydrocarbons, C11-14, n-alkanes,cyclic, <2% aromatics

Persistence and degradability

The product is biodegradable.

Amides, C8-18 (even numbers) and C18-unsatd, N,N-bis(hydroxyethyl)

Persistence and degradability

This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer.

Biodegradation

- 92.5%: 28 days

12.3. Bioaccumulative potential

The product is not bioaccumulating.

Ecological information on ingredients.

Amides, C8-18 (even numbers) and C18-unsatd, N,N-bis(hydroxyethyl)

BCF: 65.36,

Partition coefficient

log Pow: 3.75

DIETHANOLAMINE

The product is not bioaccumulating.

12.4. Mobility in soil

Mobility

The product is partly miscible with water and may spread in the aquatic environment.

Ecological information on ingredients.

Amides, C8-18 (even numbers) and C18-unsatd, N,N-bis(hydroxyethyl)

Surface tension

27.7 mN/m @ 20°C

12.5. Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

Hydrocarbons, C11-14, n-alkanes,cyclic, <2% aromatics

This substance is not classified as PBT or vPvB according to current EU criteria.

DIETHANOLAMINE

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Transport labels

14.4. Packing group

Not applicable.

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14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

National regulations

Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation

Commission Regulation (EU) No 453/2010 of 20 May 2010. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Guidance

Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

SECTION 16: Other information

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date	11/06/2015
Revision	2.0
Supersedes date	22/11/2012

Risk phrases in full

NC Not classified.
R20/22 Harmful by inhalation and if swallowed.
R36 Irritating to eyes.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.

Hazard statements in full

H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H373 May cause damage to organs (Blood, Liver, Kidneys) through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

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