

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name:** HYDROTOUGH 100**Article number:** TB2025**1.2 Relevant identified uses of the substance or mixture and uses advised against****Product category:** Industrial. For professional use only.**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:** TYGRIS Industrial  
Unit 31, Kyle Road Industrial Estate  
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Ayrshire  
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Tel +44 (0) 1294 311 066  
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Email technical@tygrisindustrial.com**Further information obtainable from:** Technical Department**1.4 Emergency telephone number:** Tel +44 (0) 1294 311 066**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Physical hazards:** Skin corrosion/irritation, Category 2 H315  
Serious eye damage/eye irritation, Category 2 H319**2.2. Label elements****Hazard statements:** H315: Causes skin irritation  
H319: Causes serious eye irritation**Hazard pictograms:** GHS07: Exclamation mark**Signal word:** Warning**Precautionary statements:** P264: Wash ... thoroughly after handling  
P280: Wear protective gloves/protective clothing/eye protection/face protection P302  
+P352: IF ON SKIN: Wash with plenty of water/...  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P321: Specific treatment (see ... on this label)  
P332+P313: If skin irritation occurs: Get medical advice/attention  
P337+P313: If eye irritation persists: Get medical advice/attention  
P362+P364: Take off contaminated clothing and wash it before reuse**2.3. Other hazards**

**SECTION 3: Composition/information on ingredients**
**3.2. Mixtures**
**Hazardous ingredients:**
**SODIUM ALKYL SULFATE**

EC	CAS	Index number	EEC Classification	CLP Classification	Percent
-	68411-30-3	-	-	-	2 - 7%

**CITRIC ACID**

201-069-1	77-92-9	-	Xi; R36	Eye Irrit. 2, H319	1-5%
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**1-METHOXY-2-PROPANOL, MONOPROPYLENE GLYCOL METHYL ETHER**

203-539-1	107-98-2	603-064-00-3	R10 R67	Flam. Liq. 3, H226 STOT SE 3, H336	>= 4.975%
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**BLEND OF ALCOHOL ESTERS**

-	-	-	Xi; R41 Xi; R37	-	> 4.95%
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**2-AMINOETHANOL, ETHANOLAMINE**

205-483-3	141-43-5	603-030-00-8	Xn; R20/21/22 C; R34	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation: dust, mist), H332 Skin Corr. 1B, H314 STOT SE 3, H335	0.9 - 4.5%
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**COCONUT DIETHANOLAMINE**

-	8051-30-7	-	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	0.7 - 4.5%
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**WATER**

231-791-2	7732-18-5	-	-	-	0.01 - 1%
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**DODECYLBENZENE SULPHONIC ACID - ISOPROPYLAMINE SALT**

247-556-2	26264-05-1	-	Xn; R22 Xi; R41 Xi; R38	-	> 0.9%
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**ALCOHOL ETHOXYLATE WITH 9MEO**

-	68439-45-2	-	Xn; R22 Xi; R41	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318	> 0.8%
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**DIETHANOLAMINE**

-	-	-	Xn; R22 Xn; R48/22 Xi; R41 Xi; R38	-	0.01 - 0.75%
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**2-METHOXYPROPANOL**

216-455-5	1589-47-5	603-106-00-0	Xn; R22 Xi; R41 Xi; R38	Flam. Liq. 3, H226 Repr. 1B, H360D STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318	< 0.03%
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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**

<b>General information:</b>	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
<b>Skin contact:</b>	Remove contaminated clothing. Drench affected area with water for at least 15 minutes. If irritation develops, obtain medical attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
<b>Eye contact:</b>	Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
<b>Ingestion:</b>	Never give anything by mouth to an unconscious person. If conscious, give half a litre of water to drink immediately. Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.
<b>Inhalation:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing has stopped, apply artificial respiration. Keep warm. Get medical attention immediately. Assure fresh air breathing. Allow the victim to rest.

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

<b>Symptoms/injuries:</b>	Not expected to present a significant hazard under anticipated conditions of normal use.
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**4.3. Indication of any immediate medical attention and special treatment needed**

<b>Medical attention and special treatment needed:</b>	No additional information available.
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**SECTION 5: Firefighting measures****5.1 Extinguishing media**

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

**Unsuitable extinguishing media:** Do not use a heavy water stream.

**5.2. Special hazards arising from the substance or mixture**

**Exposure hazards:** In case of fire, toxic incineration products may be released such as: Nitrogen Gases (NOx), Carbon Dioxide (CO<sub>2</sub>), Carbon Monoxide (CO).

**5.3. Advice for fire-fighters**

**Firefighting instructions:** Use water spray or fog for cooling exposed containers. Evacuate area. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

**Protection during firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

**General measures:** Avoid release to the environment. Ventilate area. Use protective clothing. Try to stop release. Keep people away from and upwind of spill/leak. Eliminate ignition sources.

**For non-emergency personnel:** Emergency procedures - Evacuate unnecessary personnel.

**For emergency responders:** Protective equipment - Equip cleanup crew with proper protection.  
Emergency procedures - Ventilate area.

**6.2. Environmental precautions**

**Environmental precautions:** Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

**6.3. Methods and material for containment and cleaning up**

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a suitable container. This material and its container must be disposed of in a safe way, and as per local legislation. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

**6.4. Reference to other sections**

**Other sections:** See Heading 8. Exposure controls and personal protection.

#### SECTION 7: Handling and storage

##### 7.1 Precautions for safe handling

**Handling requirements:** Avoid spilling, skin and eye contact. Provide good ventilation in process area to prevent formation of vapour. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

##### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Do NOT allow to freeze. Keep container tightly closed. Store in original container. Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

**Incompatible products:** Strong bases. Strong acids.

**Incompatible materials:** Sources of ignition. Direct sunlight.

##### 7.3. Specific end use(s)

#### SECTION 8: Exposure controls/personal protection

##### 8.1. Control parameters

###### Workplace exposure limits:

1-METHOXY-2-PROPANOL, MONOPROPYLENE GLYCOL METHYL ETHER (107-98-2)

	Long-term exposure limit (8-hour TWA)	Short-term exposure limit (15-minute)
EU	IOELV 100 ppm, 375 mg/m <sup>3</sup>	-
UK	WEL 100 ppm, 375 mg/m <sup>3</sup>	WEL 150 ppm, 375 mg/m <sup>3</sup>

2-AMINOETHANOL, ETHANOLAMINE (141-43-5)

EU	IOELV 1 ppm, 2.5 mg/m <sup>3</sup>	IOELV 3 ppm, 7.6 mg/m <sup>3</sup>
UK	WEL 1 ppm, 2.5 mg/m <sup>3</sup>	WEL 3 ppm, 7.6 mg/m <sup>3</sup>

WEL = Workplace Exposure Limits

##### 8.2. Exposure controls

###### Protective equipment:



###### Personal protective equipment:

Protective goggles. Gloves. Avoid all unnecessary exposure.

###### Hand protection:

Wear protective gloves.

###### Eye protection:

Chemical goggles or safety glasses.

###### Respiratory protection:

Wear appropriate mask.

###### Other Protection:

Do not eat, drink or smoke during use.

#### SECTION 9: Physical and chemical properties

##### 9.1. Information on basic physical and chemical properties

<b>State:</b>	Liquid
<b>Colour:</b>	Yellow. Orange
<b>Odour:</b>	Distinct
<b>Flash point:</b>	≥ 65 °C
<b>Flammability (solid, gas):</b>	Non flammable
<b>Relative density:</b>	0.978 (at 20°C)
<b>Solubility:</b>	Miscible

##### 9.2. Other information

#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

##### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions. Not established.

##### 10.3. Possibility of hazardous reactions

##### 10.4. Conditions to avoid

**Conditions to avoid:** Direct sunlight. Extremely high or low temperatures.

##### 10.5. Incompatible materials

**Incompatible materials:** Strong acids. Strong bases.

##### 10.6. Hazardous decomposition products

**Fire creates:** Fume. Carbon monoxide. Carbon dioxide.

#### SECTION 11: Toxicological information

##### 11.1. Information on toxicological effects

##### Hazardous ingredients:

2-AMINOETHANOL, ETHANOLAMINE (141-43-5)

ORAL	RAT	LD50	200 - 2000	mg/kg
DERMAL	RBT	LD50	400 - 2000	mg/kg
INHALATION	RAT	LD50	1 - 5	mg/l

ALCOHOL ETHOXYLATE WITH 9MEO (68439-45-2)

ORAL	RAT	LD50	> 200 - 2000	mg/kg
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**Skin contact:** Causes skin irritation.

**Eye contact:** Causes serious eye irritation.

**SECTION 12: Ecological information**
**12.1. Toxicity**
**Hazardous ingredients:**

2-AMINOETHANOL, ETHANOLAMINE (141-43-5)

FISHES 1	96H LC50	> 100	mg/l
OTHER AQUATIC ORGANISMS 1	96H LC50	> 10 - 100	mg/l
DAPHNIA 1	48H EC50	> 10 - 100	mg/l

**12.2. Persistence and degradability**

**Persistence and degradability:** Degradability : >97% (German Law). Not established.

**12.3. Bioaccumulative potential**
**12.4. Mobility in soil**
**12.5. Results of PBT and vPvB assessment**
**12.6. Other adverse effects**

**Additional information:** Avoid release to the environment.

**SECTION 13: Disposal considerations**
**13.1. Waste treatment methods**

**Waste disposal recommendations:** Confirm disposal procedures with environmental engineer and local regulations. Dispose in a safe manner in accordance with local/national regulations.

**Ecology - waste materials:** Avoid release to the environment.

**SECTION 14: Transport information**

**Transport class:** This product does not require a classification for transport.

**SECTION 15: Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU-Regulations:** Contains no substances with Annex XVII restrictions  
Contains no REACH candidate substance Contains no REACH Annex XIV substances.

**SECTION 16: Other information**

<b>Other information:</b>	This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.
<b>Phrases used in s.2 and s.3:</b>	<p>Acute Tox. 4 (Dermal): Acute toxicity (dermal), Category 4            Acute Tox. 4 (Inhalation:dust,mist): Acute toxicity (inhalation:dust,mist) Category 4            Acute Tox. 4 (Oral): Acute toxicity (oral), Category 4            Eye Dam. 1: Serious eye damage/eye irritation, Category 1            Eye Irrit. 2: Serious eye damage/eye irritation, Category 2            Flam. Liq. 3: Flammable liquids, Category 3            Repr. 1B: Reproductive toxicity, Category 1B            Skin Corr. 1B: Skin corrosion/irritation, Category 1B            Skin Irrit. 2: Skin corrosion/irritation, Category 2            STOT SE 3: Specific target organ toxicity — Single exposure, Category 3, Narcosis            STOT SE 3: Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation            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            H332: Harmful if inhaled            H335: May cause respiratory irritation            H336: May cause drowsiness or dizziness            H360D: May damage the unborn child            R10: Flammable            R20/21/22: Harmful by inhalation, in contact with skin and if swallowed            R22: Harmful if swallowed            R34: Causes burns            R36: Irritating to eyes            R36/38: Irritating to eyes and skin            R37: Irritating to respiratory system            R37/38: Irritating to respiratory system and skin            R38: Irritating to skin            R41: Risk of serious damage to eyes            R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed            R61: May cause harm to the unborn child            R67: Vapours may cause drowsiness and dizziness            C: Corrosive            Xi: Irritant            Xn: Harmful</p>
<b>Legal disclaimer</b>	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.