



## SAFETY DATA SHEET EVOLUTION TFR CONCENTRATE

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

#### 1.1. Product identifier

Product name                      EVOLUTION TFR CONCENTRATE

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

Identified uses                      Alkaline Cleaner.

Uses advised against              No specific uses advised against are identified.

#### 1.3. Details of the supplier of the safety data sheet

Supplier                              Scotia Forecourt Services Ltd  
Balgray Works  
Balgray Place  
Dundee  
DD3 8SH  
01382 828576  
07803 010220  
scotiajet@hotmail.co.uk

#### 1.4. Emergency telephone number

Emergency telephone              +44 (0)1382 828576 (Mon-Fri 9:00am-5:00pm GMT)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (SI 2019 No. 720)

Physical hazards                      Not Classified

Health hazards                        Skin Corr. 1B - H314 Eye Dam. 1 - H318

Environmental hazards              Not Classified

Classification (67/548/EEC or C; R34  
1999/45/EC)

#### 2.2. Label elements

##### Hazard pictograms



Signal word                              Danger

Hazard statements                      H314 Causes severe skin burns and eye damage.

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<b>Precautionary statements</b>	<p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p>
<b>Contains</b>	alcohol ethoxylate C9-11, sodium hydroxide, tetrasodium ethylene diamine tetraacetate
<b>Supplementary precautionary statements</b>	<p>P260 Do not breathe vapour/ spray.</p> <p>P310 Immediately call a POISON CENTER/ doctor.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>

### 2.3. Other hazards

#### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>alcohol ethoxylate C9-11</b>	<b>5-10%</b>
CAS number: 68439-46-3                      EC number: 614-482-0	
<b>Classification</b>	
Acute Tox. 4 - H302	
Eye Dam. 1 - H318	
<b>tetrasodium ethylene diamine tetraacetate</b>	<b>1-5%</b>
CAS number: 64-02-8                      EC number: 200-573-9	
<b>Classification</b>	
Acute Tox. 4 - H302	
Acute Tox. 4 - H332	
Eye Dam. 1 - H318	
<b>β-alanine, N-(2-carboxyethyl)-,N-coco alykyl derivs.,disodium salts</b>	<b>1-5%</b>
CAS number: 90170-43-7                      EC number: 290-476-8	
<b>Classification</b>	
Eye Irrit. 2 - H319	
<b>sodium hydroxide</b>	<b>1-5%</b>
CAS number: 1310-73-2                      EC number: 215-185-5	
<b>Classification</b>	
Met. Corr. 1 - H290	
Skin Corr. 1A - H314	
Eye Dam. 1 - H318	

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<b>2-butoxyethanol</b>	<b>1-5%</b>
CAS number: 111-76-2	EC number: 203-905-0
<b>Classification</b> Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	

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>	If in doubt, get medical attention promptly.
<b>Inhalation</b>	Get medical attention if any discomfort continues.
<b>Ingestion</b>	Give plenty of water to drink. Move affected person to fresh air at once. Get medical attention if any discomfort continues.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. Rinse with water. Continue to rinse for at least 15 minutes.
<b>Eye contact</b>	Remove affected person from source of contamination. Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

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

<b>General information</b>	Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	Severe irritation of nose and throat. Burns can occur.
<b>Ingestion</b>	Burns can occur. Nausea, vomiting.
<b>Skin contact</b>	Burns can occur. Pain or irritation.
<b>Eye contact</b>	Causes serious eye damage.

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

<b>Notes for the doctor</b>	Treat symptomatically.
<b>Specific treatments</b>	Not applicable.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	Not applicable.

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

<b>Specific hazards</b>	The product is non-combustible. None known.
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**Hazardous combustion products** None known.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Avoid breathing fire gases or vapours.

**Special protective equipment for firefighters** Firefighter's clothing will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid contact with eyes and prolonged skin contact.

### 6.2. Environmental precautions

**Environmental precautions** No negative effects on the aquatic environment are known. Not regarded as dangerous for the environment.

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

**Methods for cleaning up** Contain spillage with sand, earth or other suitable non-combustible material. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid contact with skin, eyes and clothing.

**Advice on general occupational hygiene** Clean equipment and the work area every day. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Wash contaminated clothing before reuse.

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

**Storage precautions** Keep only in the original container. Keep container tightly closed in a cool place.

### 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

##### **sodium hydroxide**

WEL: Short Term Exposure Limit (STEL): 2 mg/m<sup>3</sup>

##### **2-butoxyethanol**

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 50 ppm 246 mg/m<sup>3</sup>

Sk

Sk = Can be absorbed through the skin.

**sodium hydroxide (CAS: 1310-73-2)**

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**DNEL** Industry - Inhalation; Long term local effects: 1 mg/m<sup>3</sup>  
Consumer - Inhalation; Long term local effects: 1 mg/m<sup>3</sup>

### 2-butoxyethanol (CAS: 111-76-2)

**Ingredient comments** WEL = Workplace Exposure Limit

**DNEL** Industry - Dermal; Short term systemic effects: 89 mg/kg/day  
Industry - Inhalation; Short term systemic effects: 1091 mg/m<sup>3</sup>  
Industry - Inhalation; Short term local effects: 246 mg/m<sup>3</sup>  
Industry - Dermal; Long term systemic effects: 125 mg/kg/day  
Industry - Inhalation; Long term systemic effects: 98 mg/m<sup>3</sup>  
Consumer - Inhalation; Short term systemic effects: 426 mg/m<sup>3</sup>  
Consumer - Oral; Short term systemic effects: 26.7 mg/kg/day  
Consumer - Dermal; Short term systemic effects: 89 mg/kg/day  
Consumer - Dermal; Long term systemic effects: 75 mg/kg/day  
Consumer - Inhalation; Long term local effects: 147 mg/m<sup>3</sup>  
Consumer - Inhalation; Long term systemic effects: 59 mg/m<sup>3</sup>  
Consumer - Oral; Long term systemic effects: 6.3 mg/kg/day

**PNEC** Fresh water; 8.8 mg/l  
marine water; 0.88 mg/l  
Sediment (Freshwater); 8.14 mg/kg  
Sediment (Marinewater); 3.46 mg/kg  
Soil; 2.8 mg/kg  
STP; 463 mg/l

## 8.2. Exposure controls

### Protective equipment



### Appropriate engineering controls

Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.

### Eye/face protection

Contact lenses should not be worn when working with this chemical. Chemical splash goggles.

### Hand protection

Wear protective gloves. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation.

### Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

### Hygiene measures

Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Wash promptly with soap and water if skin becomes contaminated. Wash contaminated clothing before reuse.

### Respiratory protection

No specific recommendations.

### Environmental exposure controls

Keep container tightly sealed when not in use.

## SECTION 9: Physical and chemical properties

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

## EVOLUTION TFR CONCENTRATE

<b>Appearance</b>	Liquid.
<b>Colour</b>	Green.
<b>Odour</b>	Mild.
<b>pH</b>	pH (concentrated solution): 14
<b>Melting point</b>	< 0°C
<b>Initial boiling point and range</b>	> 100°C @ 760 mm Hg
<b>Flash point</b>	> 100°C
<b>Relative density</b>	~ 1.058
<b>Viscosity</b>	Not viscous.

### 9.2. Other information

#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

**Reactivity** The reactivity data for this product will be typical of those for the following class of materials: Alkalis.

##### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

##### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** None known.

##### 10.4. Conditions to avoid

**Conditions to avoid** Avoid exposure to high temperatures or direct sunlight. Avoid freezing.

##### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents. Strong reducing agents.

##### 10.6. Hazardous decomposition products

**Hazardous decomposition products** May emit toxic fumes under fire conditions.

#### SECTION 11: Toxicological information

##### 11.1. Information on toxicological effects

###### Acute toxicity - oral

**ATE oral (mg/kg)** 4,974.07

###### Acute toxicity - dermal

**ATE dermal (mg/kg)** 49,875.31

###### Acute toxicity - inhalation

**ATE inhalation (vapours mg/l)** 146.47

**Inhalation** Vapours may irritate throat/respiratory system.

**Ingestion** May cause discomfort if swallowed.

**Skin contact** Prolonged skin contact may cause redness and irritation.

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**Eye contact** May cause irritation.

### SECTION 12: Ecological information

**Ecotoxicity** The product is not expected to be hazardous to the environment.

#### 12.1. Toxicity

**Toxicity** Not applicable.

#### 12.2. Persistence and degradability

**Persistence and degradability** The product is biodegradable.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** The product is not bioaccumulating.

#### 12.4. Mobility in soil

**Mobility** The product is soluble in water.

#### 12.5. Results of PBT and vPvB assessment

#### 12.6. Other adverse effects

**Other adverse effects** None known.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**General information** Dispose of waste product or used containers in accordance with local regulations

### SECTION 14: Transport information

#### 14.1. UN number

**UN No. (ADR/RID)** 3266

**UN No. (IMDG)** 3266

**UN No. (ICAO)** 3266

**UN No. (ADN)** 3266

#### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)

**Proper shipping name (IMDG)** CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)

**Proper shipping name (ICAO)** CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)

**Proper shipping name (ADN)** CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)

#### 14.3. Transport hazard class(es)

**ADR/RID class** 8

**ADR/RID classification code** C5

**ADR/RID label** 8

**IMDG class** 8

**ICAO class/division** 8

**ADN class** 8

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### Transport labels



#### 14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

#### 14.6. Special precautions for user

EmS	F-A, S-B
ADR transport category	3
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

#### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

### SECTION 15: Regulatory information

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

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>General information</b>	Only trained personnel should use this material.
<b>Issued by</b>	HS&E Manager.
<b>Revision date</b>	06/06/2023
<b>Revision</b>	3
<b>Supersedes date</b>	22/01/2021
<b>SDS number</b>	5834
<b>Risk phrases in full</b>	R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R22 Harmful if swallowed. R34 Causes burns. R35 Causes severe burns. R36 Irritating to eyes. R36/38 Irritating to eyes and skin. R41 Risk of serious damage to eyes.



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**Hazard statements in full**

H290 May be corrosive to metals.  
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.

**Code****Other Information**

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.