



SAFETY DATA SHEET RO GT V652

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

1.1. Product identifier

Product name RO GT V652

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

Identified uses Scavenger

1.3. Details of the supplier of the safety data sheet

Supplier REDA Oilfield
Concorde House,
Endeavour Drive,
Arnhall Business Park,
Westhill,
Aberdeenshire
AB32 6UF
Tel: +44(0)1224 937888
Fax: +44(0)1224 937819

Contact person QHSE@redaoilfield.com

1.4. Emergency telephone number

Emergency telephone UK: +44(0)1224 937888

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Acute Tox. 3 - H331 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.

RO GT V652

| | |
|---|--|
| Precautionary statements | <p>P261 Avoid breathing vapour/ spray.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</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> |
| Contains | 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol, 2-aminoethanol |
| Supplementary precautionary statements | <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P330 Rinse mouth.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p> |

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| | | |
|--|--|----------------------|
| 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol | | 30-60% |
| CAS number: 4719-04-4 | | EC number: 225-208-0 |
| Classification Acute Tox. 4 - H302 Acute Tox. 2 - H330 Skin Sens. 1 - H317 STOT RE 1 - H372 | | |
| 2-aminoethanol | | 1-5% |
| CAS number: 141-43-5 | | EC number: 205-483-3 |
| Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Corr. 1B - H314 STOT SE 3 - H335 | | |

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 at once. Rinse nose and mouth with water. Get medical attention immediately. |
|-------------------|--|

RO GT V652

| | |
|-----------------------------------|--|
| Ingestion | Remove affected person from source of contamination. Remove person to fresh air and keep comfortable for breathing. Never give anything by mouth to an unconscious person. Give plenty of water to drink. Do not induce vomiting. Get medical attention immediately. |
| Skin contact | Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if symptoms are severe or persist after washing. |
| Eye contact | Remove any contact lenses and open eyelids wide apart. Rinse with water. Continue to rinse for at least 15 minutes and get medical attention. |
| Protection of first aiders | First aid personnel should wear appropriate protective equipment during any rescue. |

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

| | |
|---------------------|--|
| Inhalation | Toxic if inhaled. May cause sensitisation or allergic reactions in sensitive individuals. |
| Ingestion | Harmful if swallowed. Prolonged or repeated exposure may cause the following adverse effects: May cause liver and/or renal damage. |
| Skin contact | Causes skin irritation. May cause an allergic skin reaction. |
| Eye contact | Causes serious eye irritation. |

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 | Use alcohol-resistant foam, carbon dioxide or dry powder to extinguish. Use dry powder, dry sand or dry earth to extinguish. Water spray, fog or mist. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |

5.2. Special hazards arising from the substance or mixture

| | |
|--------------------------------------|--|
| Specific hazards | None known. |
| Hazardous combustion products | Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Oxides of nitrogen. |

5.3. Advice for firefighters

| | |
|--|--|
| Protective actions during firefighting | In case of fire: Evacuate area. No action shall be taken without appropriate training or involving any personal risk. Control run-off water by containing and keeping it out of sewers and watercourses. |
| Special protective equipment for firefighters | Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------------------------|--|
| Personal precautions | No action shall be taken without appropriate training or involving any personal risk. Evacuate area. Wear protective clothing as described in Section 8 of this safety data sheet. |
| For non-emergency personnel | Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. |
| For emergency responders | Wear protective clothing as described in Section 8 of this safety data sheet. |

6.2. Environmental precautions

RO GT V652

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Small Spillages: Stop leak if safe to do so. Move containers from spillage area. Do not touch or walk into spilled material. Absorb spillage with sand or other inert absorbent. Large Spillages: Absorb spillage with sand or other inert absorbent. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor.

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 For professional users only. Persons susceptible to allergic reactions should not handle this product. For personal protection, see Section 8.

Advice on general occupational hygiene Persons susceptible to allergic reactions should not handle this product. Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

2-aminoethanol

Long-term exposure limit (8-hour TWA): WEL 1 ppm 2.5 mg/m³

Short-term exposure limit (15-minute): WEL 3 ppm 7.6 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield.

Hand protection

To protect hands from chemicals, gloves should comply with European Standard EN374. It is recommended that gloves are made of the following material: Butyl rubber. Nitrile rubber. Viton rubber (fluoro rubber). Frequent changes are recommended.

RO GT V652

| | |
|--|---|
| Other skin and body protection | Avoid contact with skin. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. |
| Hygiene measures | Good personal hygiene procedures should be implemented. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product. Do not smoke in work area. Provide eyewash station and safety shower. |
| Respiratory protection | Wear a full facepiece respirator fitted with the following cartridge: Gas filter, type A2. Gas filter, type K. |
| Environmental exposure controls | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Keep container tightly sealed when not in use. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. |

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|--|---|
| Appearance | Liquid. |
| Colour | Colourless to pale yellow. |
| Odour | Amine. |
| pH | pH (concentrated solution): 9.5 - 11.5 |
| Initial boiling point and range | >110°C @ 760 mm Hg |
| Flash point | The product is not flammable. |
| Relative density | 1.09 - 1.15 @ 20°C |
| Solubility(ies) | Soluble in water. |
| Oxidising properties | Does not meet the criteria for classification as oxidising. |

9.2. Other information

| | |
|--------------------------|--------------------------|
| Other information | No information required. |
|--------------------------|--------------------------|

SECTION 10: Stability and reactivity

10.1. Reactivity

| | |
|-------------------|--|
| Reactivity | See Section 10.3 (Possibility of hazardous reactions) for further information. |
|-------------------|--|

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 | The following materials may react with the product: Acids. Strong oxidising agents. |
|---|---|

10.4. Conditions to avoid

| | |
|----------------------------|---|
| Conditions to avoid | Avoid heat, flames and other sources of ignition. |
|----------------------------|---|

10.5. Incompatible materials

| | |
|---------------------------|---|
| Materials to avoid | Avoid contact with the following materials: Acids. Strong oxidising agents. |
|---------------------------|---|

10.6. Hazardous decomposition products

RO GT V652

Hazardous decomposition products Heating may generate the following products: Oxides of carbon. Oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 892.86

Acute toxicity - dermal

ATE dermal (mg/kg) 23,571.43

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 3.0

Toxicological information on ingredients.

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol

Acute toxicity - oral

ATE oral (mg/kg) 500.0

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 0.05

SECTION 12: Ecological Information

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 21.7 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 24 hour: 50.6 - 68.1 mg/l, Daphnia magna

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

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects No information required.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

RO GT V652

| | |
|----------------------------|---|
| General information | The generation of waste should be minimised or avoided wherever possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. |
| Disposal methods | Dispose of waste via a licensed waste disposal contractor. |
| Waste class | Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments. |

SECTION 14: Transport information

14.1. UN number

| | |
|------------------|------|
| UN No. (ADR/RID) | 2810 |
| UN No. (IMDG) | 2810 |
| UN No. (ICAO) | 2810 |
| UN No. (ADN) | 2810 |

14.2. UN proper shipping name

| | |
|--------------------------------|--|
| Proper shipping name (ADR/RID) | TOXIC LIQUID, ORGANIC, N.O.S. (CONTAINS 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol) |
| Proper shipping name (IMDG) | TOXIC LIQUID, ORGANIC, N.O.S. (CONTAINS 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol) |
| Proper shipping name (ICAO) | TOXIC LIQUID, ORGANIC, N.O.S. (CONTAINS 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol) |
| Proper shipping name (ADN) | TOXIC LIQUID, ORGANIC, N.O.S. (CONTAINS 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol) |

14.3. Transport hazard class(es)

| | |
|-----------------------------|-----|
| ADR/RID class | 6.1 |
| ADR/RID classification code | T1 |
| ADR/RID label | 6.1 |
| IMDG class | 6.1 |
| ICAO class/division | 6.1 |
| ADN class | 6.1 |

Transport labels



14.4. Packing group

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

RO GT V652

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-A, S-A

ADR transport category 2

Emergency Action Code 2X

Hazard Identification Number 60
(ADR/RID)

Tunnel restriction code (E)

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

National regulations The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
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).

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

Issued by Technical Dept.

Revision date 07/02/2018

Revision 6

Supersedes date 27/01/2016

SDS number 4791

RO GT V652

Hazard statements in full

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H372 Causes damage to organs through prolonged or repeated exposure.

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.