

Material Safety Data Sheet TRU GRIT AC-20 Fuel Treatment

Section 1 – Chemical Product and Company Identification

PRODUCT NAME

TRU GRIT AC-20 [TRU GRIT AC-20 FUEL TREATMENT][TRU GRIT AC-20 Fuel Treatment]

PRODUCT USE

Used according to manufacturer's directions.
Fuel treatment.

SUPPLIER

Company:

ONSHORE OILS PTY LTD

Address:

38a Aquarium Ave,
Hemmant
QLD, 4174
Australia

Telephone: +61 7 3348 8388

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www.onshoreoils.com.au

Section 2 - Hazards Identification

STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to NOHSC Criteria, and ADG Code.

COMBUSTIBLE LIQUID, regulated under AS1940 for Bulk Storage purposes only.

CHEMWATCH HAZARD RATINGS



Scale: Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4



RISK

- May form explosive peroxides
- Harmful by inhalation, in contact with skin and if swallowed
- Irritating to eyes, respiratory system and skin
- Cumulative effects may result following exposure*
- Limited evidence of carcinogenic effect*
- May be harmful to the foetus/embryo*
- May possibly affect fertility*
- Vapours potentially cause drowsiness and dizziness*

*(Limited Evidence)

Safety

- Do not breathe gas/fumes/vapour/spray
- Avoid contact with skin
- Avoid contact with eyes
- Wear suitable protective clothing
- Wear suitable gloves
- Wear eye/face protection
- Handle and open container with care
- Use only in well ventilated areas
- Keep container in a well-ventilated place
- Avoid exposure – obtain special instructions before use
- To clean the floor and all objects contaminated by this material, use water
- Keep container tightly closed
- Keep away from food, drink and animal feeding stuffs
- In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre
- If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre (Show container or label)

Section 3 - Composition /Information on Ingredients

NAME	CAS RN	%
Ethylene Glycol Monobutyl Ether	111-76-2	>60
Additive(s)		Not Spec

Section 4- First Aid Measures

SWALLOWED

- IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.
- For advice, contact a Poisons Information Centre or a doctor.
- Urgent hospital treatment is likely to be needed.
- In the meantime, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.

EYE

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

NOTES TO PHYSICIAN

■ Followed acute or short term repeated exposures to ethylene glycol monoalkyl ethers and their acetates:

- Hepatic metabolism produces ethylene glycol as a metabolite.
- Clinical presentation, following severe intoxication, resembles that of ethylene glycol exposures.
- Monitoring the urinary excretion of the alkoxyacetic acid metabolites may be a useful indication of exposure. [Ellenhorn and Barceloux: Medical Toxicology].

For acute or short term repeated exposures to ethylene glycol:

- Early treatment of ingestion is important. Ensure emesis is satisfactory.
- Test and correct for metabolic acidosis and hypocalcaemia.
- Apply sustained diuresis when possible with hypertonic mannitol.
- Evaluate renal status and begin haemodialysis if indicated. [I.L.O].

Section 5 - Fire Fighting Measures

EXTINGUISHING MEDIA

- Water spray or fog.
- Alcohol stable foam.
- Dry chemical powder.
- Carbon dioxide.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Use water delivered as a fine spray to control fire and cool adjacent area.

FIRE/EXPLOSION HAZARD

- Combustible.
- Slight fire hazard when exposed to heat or flame.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).

Combustion products include: carbon dioxide (CO₂), other pyrolysis products typical of burning organic material.

May emit poisonous fumes.

May emit corrosive fumes.

FIRE INCOMPATIBILITY

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

HAZCHEM

None

Personal Protective Equipment

Breathing apparatus.

Chemical splash suit.

Section 6 - Accidental Release Measures

MINOR SPILLS

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.

MAJOR SPILLS

Moderate hazard.

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - Handling and Storage

PROCEDURE FOR HANDLING

- DO NOT allow clothing wet with material to stay in contact with skin.
- The tendency of many ethers to form explosive peroxides is well documented. Ethers lacking non-methyl hydrogen atoms adjacent to the ether link are thought to be relatively safe
- DO NOT concentrate by evaporation, or evaporate extracts to dryness, as residues may contain explosive peroxides with DETONATION potential.
- Any static discharge is also a source of hazard.
- Before any distillation process remove trace peroxides by shaking with excess 5% aqueous ferrous sulphate solution or by percolation through a column of activated alumina.
- Distillation results in uninhibited ether distillate with considerably increased hazard because of risk of peroxide formation on storage.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

SUITABLE CONTAINER

- DO NOT use aluminium or galvanised containers.

- Metal can or drum
- Packaging as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

Avoid reaction with oxidising agents.

Strong acids.

Strong alkalis.

May attack some forms of plastic and rubber coatings

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- No smoking, naked lights or ignition sources.
- Store in a cool, dry, well-ventilated area.

Section 8 - Exposure Controls/personal Protection

EXPOSURE CONTROLS

Source	Materials	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³	Peak ppm	Peak mg/m ³	TWA F/CC	Notes
Australia Exposure Standards	Ethylene Glycol Monobutyl Ether (2-Butoxyethanol)	20	96.9	50	242				Sk

PERSONAL PROTECTION



RESPIRATOR

Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

EYE

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account

of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

HANDS/FEET

- Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

- Frequency and duration of contact,
- Chemical resistance of glove material,
- Glove thickness and
- Dexterity.

OTHER

- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.

ENGINEERING CONTROLS

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

Section 9 - Physical and Chemical Properties

APPEARANCE

Fluorescent pink/red liquid with a slight odour; miscible with water.

PHYSICAL PROPERTIES

Liquid.

Mixes with water.

State	Liquid	Molecular Weight	Not Applicable
Melting Range (°C)	<3	Viscosity	Not Available
Boiling Range (°C)	>150	Solubility in water(g/L)	Miscible
Flash Point (°C)	64	pH (1% solution)	Not Available
Decomposition Temp (°C)	Not Available	pH (as supplied)	Not Available

Auto ignition Temp (°C)	Not Available	Vapour Pressure(kPa)	0.1 @20C
Upper Explosive Limit (%)	12.7 (EGMBE)	Specific Gravity (water-1)	0.91
Lower Explosive Limit (%)	1.1 (EGMBE)	Relative Vapour Density (Air=1)	4
Volatile Component (% vol)	>80	Evaporation Rate	Not Available
Ethylene Glycol Monobutyl Ether			
Log Kow (Prager 1995)		0.83	
Log Kow (Sangster 1997)		0.83	

Section 10 - Stability and Reactivity

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - Toxicological Information

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

- Harmful by inhalation, in contact with skin and if Swallowed.
- Irritating to eyes, respiratory system and skin.
- Vapours may cause dizziness or suffocation.
- Vapours potentially cause drowsiness and Dizziness*.
- * (limited evidence).

CHRONIC HEALTH EFFECTS

- Limited evidence of a carcinogenic Effect*.
- May be harmful to the foetus/ embryo*.
- May possibly affect fertility*.
- Cumulative effects may result following Exposure*.
- * (limited evidence).

TOXICITY AND IRRITATION

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a nonallergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic).

This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. For ethylene glycol monoalkyl ethers and their acetates (EGMAEs):

Typical members of this category are ethylene glycol propylene ether (EGPE), ethylene glycol butyl ether (EGBE) and ethylene glycol hexyl ether (EGHE) and their acetates.

EGMAEs are substrates for alcohol dehydrogenase isozyme ADH-3, which catalyzes the conversion of their terminal alcohols to aldehydes (which are transient metabolites).

Acute Toxicity: Oral LD50 values in rats for all category members range from 739 (EGHE) to 3089 mg/kg bw (EGPE), with values increasing with decreasing molecular weight.

Exposure of pregnant rats to ethylene glycol monobutyl ether (2-butoxyethanol) at 100 ppm or rabbits at 200 ppm during organogenesis resulted in maternal toxicity and embryotoxicity including a decreased number of viable implantations per litter.

Slight foetotoxicity in the form of poorly ossified or unossified skeletal elements was also apparent in rats.

At least one researcher has stated that the reproductive effects were less than that of other monoalkyl ethers of ethylene glycol.

CARCINOGEN			
2- Butoxyethanol	International Agency for Research on Cancer (IARC) – Agents Reviewed by the IARC Monographs	Group	3
SKIN			
Ethylene Glycol Monobutyl Ether	Australia Exposure Standards – Skin	Notes	Sk

Section 12 - Ecological Information

No data

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
TRU GRIT AC-20 Fuel Treatment	No Data Available	No Data Available		
Ethylene Glycol Monobutyl Ether	LOW	LOW	LOW	HIGH

Section 13 - Disposal Considerations

Containers may still present a chemical hazard/ danger when empty.

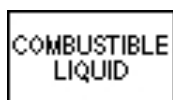
Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container cannot be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- Where possible retain label warnings and MSDS and observe all notices pertaining to the product.
- Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.
- A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

Section 14 - Transportation Information



Labels Required: COMBUSTIBLE LIQUID, regulated under AS1940 for Bulk Storage purposes only.

HAZCHEM:

None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

Section 15 - Regulatory Information

POISONS SCHEDULE S6

REGULATIONS

Regulations for ingredients

Ethylene glycol monobutyl ether (CAS: 111-76-2) is found on the following regulatory lists;

"Australia Exposure Standards", "Australia Hazardous Substances", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Fragrance Association (IFRA) Survey: Transparency List"

No data for TRU GRIT AC-20 Fuel Treatment (CW: 23-2980)

Section 16 - Other Information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.



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This is the end of the MSDS.