

DIESEL TOTAL ACTION TREATMENT

MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product form: Mixture
Trade name: Total Action Treatment - Diesel
Product code: 595

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

1.2.1. Relevant identified uses

No additional information available.

1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheet

Fast Racing Fuels
20 Brand Road, Brand Park, Unit 6, Westmead, Durban, South Africa, 3610
T +27 (67) 777 2000
info@fastracingfuels.co.za - www.fastracingfuels.co.za

1.4. Emergency number: +27 (67) 777 2000

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2	H225
Skin corrosion/irritation, Category 2	H315
Germ cell mutagenicity, Category 1B	H340
Carcinogenicity, Category 1B	H350
Reproductive toxicity, Category 2	H361
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity — Repeated exposure, Category 1	H372
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411

Full text of H statements: See section 16

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. May cause cancer. May cause genetic defects. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. May cause drowsiness or dizziness. Causes skin irritation. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):



Signal word (CLP):

Danger

Hazardous ingredients:

Naphtha; Confidential; heptane, n-heptane; octane, n-octane; methylcyclohexane; cyclohexane

Hazard statements (CLP):

H225 - Highly flammable liquid and vapour.
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H340 - May cause genetic defects.
H350 - May cause cancer.
H361 - Suspected of damaging fertility or the unborn child.
H372 - Causes damage to organs through prolonged or repeated exposure.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP):

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground and bond container and receiving equipment.
P241 - Use explosion-proof equipment.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P312 - Call a POISON CENTRE or doctor if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Contains vPvB substances \geq 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Naphtha	(CAS-No.) 64742-82-1 (EC-No.) 265-185-4 (EC Index-No.) 649-330-00-2	38.658 - 38.658	Carc. 1B, H350 Muta. 1B, H340 Asp. Tox. 1, H304 STOT RE 1, H372
2-ethylhexyl nitrate	(CAS-No.) 27247-96-7 (EC-No.) 248-363-6	18.294 - 21.343	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 Aquatic Chronic 2, H411
Kerosine	(CAS-No.) 8008-20-6 (EC-No.) 232-366-4 (EC Index-No.) 649-404-00-4	0 - 12.886	Asp. Tox. 1, H304
heptane, n-heptane	(CAS-No.) 142-82-5 (EC-No.) 205-563-8 (EC Index-No.) 601-008-00-2	3.2215 - 6.443	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
octane, n-octane	(CAS-No.) 111-65-9 (EC-No.) 203-892-1 (EC Index-No.) 601-009-00-8	0 - 6.443	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
methylcyclohexane	(CAS-No.) 108-87-2 (EC-No.) 203-624-3 (EC Index-No.) 601-018-00-7	3.2215 - 6.443	Skin Corr. 1A, H314
Confidential	(EC-No.) 215-535-7 (EC Index-No.) 601-022-00-9	0.6443 - 3.2215	Skin Corr. 1A, H314
Confidential	(EC-No.) 203-625-9 (EC Index-No.) 601-021-00-3	0.6443 - 3.2215	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315
methylcyclohexane	(CAS-No.) 108-87-2 (EC-No.) 203-624-3 (EC Index-No.) 601-018-00-7	0.6443 - 3.2215	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304

cyclohexane	(CAS-No.) 110-82-7 (EC-No.) 203-806-2 (EC Index-No.) 601-017-00-1	0.6443 - 3.2215	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2-ethyl-1-hexanol	(CAS-No.) 104-76-7 (EC-No.) 203-234-3	0.3049 - 1.5245	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general:	IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation:	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact:	Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact:	Rinse eyes with water as a precaution.
First-aid measures after ingestion:	Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects:	May cause drowsiness or dizziness.
Symptoms/effects after skin contact:	Irritation.

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

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Fire hazard: Highly flammable liquid and vapour.

Hazardous decomposition products in case of fire: Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment: Collect spillage.

Methods for cleaning up: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may

Hygiene measures:

accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures:
Storage conditions:

Ground/bond container and receiving equipment. Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

7.3. Specific end use(s)

No additional information available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

8.1. Control parameters

Physical state:	Liquid
Colour:	No data available
Odour:	No data available
Odour threshold:	No data available
pH:	≈ 11.9
Relative evaporation rate (butylacetate=1):	No data available
Melting point:	Not applicable
Freezing point:	No data available
Boiling point:	≈ 82 °C
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available

2-ethyl-1-hexanol (104-76-7)		
EU	IOELV TWA (ppm)	1 ppm
Germany	TRGS 910 Acceptance concentration notes	

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:	Protective gloves
Eye protection:	Safety glasses
Skin and body protection:	Wear suitable protective clothing
Respiratory protection:	[In case of inadequate ventilation] wear respiratory protection.
Environmental exposure controls:	Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	No data available
Odour:	No data available
Odour threshold:	No data available
pH:	No data available
Relative evaporation rate (butylacetate=1):	No data available
Melting point:	Not applicable
Freezing point:	No data available
Boiling point:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Flammability (solid, gas):	Not applicable
Vapour pressure:	No data available
Relative vapour density at 20 °C:	No data available
Relative density:	No data available
Solubility:	No data available
Log Pow:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Explosive properties:	No data available
Oxidising properties:	No data available
Explosive limits:	No data available

9.2. Other information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity (oral):	Not classified
Acute toxicity (dermal):	Not classified
Acute toxicity (inhalation):	Not classified

Confidential	
LD50 oral rat	≈ 4300 mg/kg
LD50 dermal rabbit	≈ 2000 mg/kg

Confidential	
LD50 oral rat	≈ 5000
LD50 dermal rabbit	≈ 12124 mg/kg

2-ethylhexyl nitrate (27247-96-7)	
LD50 oral rat	> 9600 mg/kg (Other, Rat, Male/female, Experimental value)

2-ethyl-1-hexanol (104-76-7)	
LD50 oral rat	3290 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male, Experimental value)
LD50 dermal rat	> 3000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, Rat, Male/female, Experimental value)

LC50 inhalation rat (mg/l)	0.89 - 5.3 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Experimental value)
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Skin corrosion/irritation:	Causes skin irritation.
Serious eye damage/irritation:	Not classified
Respiratory or skin sensitisation:	Not classified
Germ cell mutagenicity:	May cause genetic defects.
Carcinogenicity:	May cause cancer.
Reproductive toxicity:	Suspected of damaging fertility or the unborn child.
STOT-single exposure:	May cause drowsiness or dizziness.
STOT-repeated exposure:	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard:	Not classified

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - general:	Toxic to aquatic life with long lasting effects.
Acute aquatic toxicity:	Not classified
Chronic aquatic toxicity:	Toxic to aquatic life with long lasting effects.

2-ethylhexyl nitrate (27247-96-7)	
LC50 fish 1	2 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Semi-static system, Fresh water, Experimental value)
EC50 Daphnia 1	> 12.6 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
ErC50 (algae)	3.22 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value)

2-ethyl-1-hexanol (104-76-7)	
LC50 fish 1	17.1 mg/l (EU Method C.1, 96 h, Leuciscus idus, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	39 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
EC50 72h algae (1)	16.6 mg/l (EU Method C.3, Desmodesmus subspicatus, Static system, Fresh water, Experimental value)

12.2. Persistence and degradability

2-ethylhexyl nitrate (27247-96-7)	
Persistence and degradability	Not readily biodegradable in water.

2-ethyl-1-hexanol (104-76-7)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.

12.3. Bioaccumulative potential

2-ethylhexyl nitrate (27247-96-7)	
Log Pow	5.24 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

2-ethyl-1-hexanol (104-76-7)	
BCF other aquatic organisms 1	25.33 (BCFWIN, Calculated value)
Log Pow	2.9 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

2-ethylhexyl nitrate (27247-96-7)	
Log Koc	3.75 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Low potential for mobility in soil.

2-ethyl-1-hexanol (104-76-7)	
Surface tension	0.000047 N/m (20 °C, 0.81 g/l)
Ecology - soil	Highly mobile in soil.

12.5. Results of PBT and vPvB assessment

Component	
2-ethylhexyl nitrate (27247-96-7)	This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII
2-ethyl-1-hexanol (104-76-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information: Flammable vapours may accumulate in the container.

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR): UN 1992
UN-No. (IMDG): Not applicable
UN-No. (IATA): Not applicable
UN-No. (ADN): Not applicable
UN-No. (RID): Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR): Not applicable
Proper Shipping Name (IMDG): Not applicable
Proper Shipping Name (IATA): Not applicable
Proper Shipping Name (ADN): Not applicable
Proper Shipping Name (RID): Not applicable
Transport document description (ADR): UN 1992, ENVIRONMENTALLY HAZARDOUS

ADR

Transport hazard class(es) (ADR): Not applicable



IMDG

Transport hazard class(es) (IMDG): Not applicable

IATA

Transport hazard class(es) (IATA): Not applicable

ADN

Transport hazard class(es) (ADN): Not applicable

RID

Transport hazard class(es) (RID): Not applicable

14.4. Packing group

Packing group (ADR): Not applicable
 Packing group (IMDG): Not applicable
 Packing group (IATA): Not applicable
 Packing group (ADN): Not applicable
 Packing group (RID): Not applicable

14.5. Environmental hazards

Dangerous for the environment: Yes
 Marine pollutant: Yes
 Other information: No supplementary information available

14.6. Special precautions for user

Overland transport: No data available
 Transport by sea: Not applicable
 Air transport: Not applicable
 Inland waterway transport: Not applicable
 Rail transport: Not applicable

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

Not applicable

SECTION 15: REGULATORY INFORMATION

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions.

Contains no substance on the REACH candidate list.

Contains no REACH Annex XIV substances.

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

Germany

Reference to AwSV:

Water hazard class (WGK) 3, severe hazard to waters (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV:

Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen:

Naphtha, Kerosine are listed

SZW-lijst van mutagene stoffen:

Naphtha, Kerosine are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding:

None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid:

None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling:

None of the components are listed

Denmark

Danish National Regulations:

Young people below the age of 18 years are not allowed to use the product.

Pregnant/breastfeeding women working with the product must not be in direct contact with the product. The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION FULL TEXT OF H- AND EUH-STATEMENTS:

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Muta. 1B	Germ cell mutagenicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, 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
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.

H410
H411

Very toxic to aquatic life with long lasting effects.
Toxic to aquatic life with long lasting effects.

DISCLAIMER

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Performance

Formulated for specific applications to ensure optimum performance.



Consistency

All our products offer industry leading levels of consistency and repeatability.



Quality

We pride ourselves on offering the highest standard of quality in each of our products.