

DIESEL TREATMENT FOR FLEETS

MATERIAL SAFETY DATA SHEET

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

1.1. Product identifier

Product form: Mixture

Product name: Diesel Treatment For Fleets

Product code: 386

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

1.2.1. Relevant identified uses

Intended for general public

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

Flammable liquids, Category 3 H226
Acute toxicity (oral), Category 4 H302
Skin corrosion/irritation, Category 2 H315

Specific target organ toxicity -

Single exposure, Category 3, Narcosis H336

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

No additional information available



2.2. Label elements

Signal word (CLP):

Hazard statements (CLP):

Contains:

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

Hazard pictograms (CLP):







GHS09

GHS02

Warning

n-nonane; 2-ethylhexyl nitrate; cerium dioxide

H226 - _H_226_EU. H302 - _H_302_EU. H315 - _H_315_EU. H336 - _H_336_EU. H411 - H 411 EU.

Precautionary statements (CLP):

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 - _P_233_EU. P240 - _P_240_2_EU. P241 - _P_241_2_EU. P261 - P 261 EU. P264 - P 264 EU. P270 - _P_270_EU. P271 - _P_271_EU. P273 - _P_273_EU. P280 - _P_280_2_EU.

P301+P312 - _P_301-312_4_EU. P302+P352 - _P_302-352_2_EU.

P303+P361+P353 - P 303-361-353 3 EU.

P304+P340 - _P_304-340_2_EU.

P312 - P 312 4 EU. P321 - _P_321_EU. P330 - _P_330_EU.

P332+P313 - _P_332-313_EU. P362+P364 - _P_362-364_EU. P370+P378 - P 370-378 2 EU.

P391 - P 391 EU.

P403+P233 - _P_403-233_EU. P403+P235 - _P_403-235_EU.

P405 - _P_405_EU. P501 - _P_501_EU.

2.3. Other hazards

Contains vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII.



3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-ethylhexyl nitrate	(CAS-No.) 27247-96-7 (EC-No.) 248-363-6	20 – 40	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 Aquatic Chronic 2, H411
n-nonane	(CAS-No.) 111-84-2 (EC-No.) 203-913-4	10 – 20	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
cerium dioxide	(CAS-No.) 1306-38-3 (EC-No.) 215-150-4	1 – 5	Acute Tox. 4 (Oral), H302

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

No additional information available

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

No additional information available

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

No additional information available

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

No additional information available

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

No additional information available



SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

No additional information available

6.4. Reference to other sections

No additional information available

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

No additional information available

7.2. Conditions for safe storage, including any incompatibilities

No additional information available

7.3. Specific end use(s)

No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters n-nonane (111-84-2)

Belgium - Occupational Exposure Limits

Limit value (mg/m³) 1065 mg/m³ Limit value (ppm) 200 ppm

France - Occupational Exposure Limits

VME (mg/m³) 1050 mg/m³ VME (ppm) 200 ppm



USA - ACGIH - Occupational Exposure Limits ACGIH TWA (ppm)

200 ppm

8.2. Exposure controls

No additional information available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour:

Odour:

No data available

Boiling point: $\approx 151 \,^{\circ}\text{C}$ Flash point: $\approx 31 \,^{\circ}\text{C}$

Auto-ignition temperature:

Decomposition temperature:

Flammability (solid, gas):

No data available

No data available

Vapour pressure: $\approx 4.7 \text{ hPa}$

Relative vapour density at 20 °C: No data available Relative density: No data available Density: $\approx 0.888 \text{ g/cm}^3$

Solubility: Organic solvent:≈ 68.9 g/100ml

Partition coefficient n-octanol/water (Log Pow): No data available Viscosity, kinematic: No data available No data available Explosive properties: No data available No data available Oxidising properties: No data available Explosive limits: No data available 0.7 – 5.6 vol %

9.2. Other information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No additional information available

10.2. Chemical stability

No additional information available



10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity (oral):

Acute toxicity (dermal):

Acute toxicity (inhalation):

Mot classified

Not classified

Diesel Treatment for Fleet

ATE CLP (oral) 1176.471 mg/kg bodyweight

n-nonane (111-84-2)

LD50 oral rat > 5000 mg/kg bodyweight (Equivalent or similar to

OECD 401, Rat, Male / female, Read-across, Oral,

14 day(s))

LD50 dermal rabbit > 2000 mg/kg bodyweight (Equivalent or similar to

OECD 402, 24 h, Rabbit, Male / female,

Read-across, Dermal, 14 day(s))

LC50 inhalation rat (mg/l) 17 mg/l (Equivalent or similar to OECD 403, 4 h,

Rat, Male, Literature, Inhalation (vapours), 14

day(s))

2-ethylhexyl nitrate (27247-96-7)

LD50 oral rat > 9600 mg/kg (Other, Rat, Male/female, Experimen

tal value)

cerium dioxide (1306-38-3)

LD50 oral rat 1000 mg/kg (Rat, Oral)

Skin corrosion/irritation:

Serious eye damage/irritation:

Respiratory or skin sensitisation:

Germ cell mutagenicity:

Mot classified

Not classified

Not classified



Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT-single exposure: _H_336_EU.

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Acute aquatic toxicity:

Chronic aquatic toxicity:

Not classified

_H_411_EU.

n-nonane (111-84-2)

EC50 Daphnia 1 0.2 mg/l (48 h, Daphnia magna, Static system, Fresh

water, Experimental value, Locomotor effect)

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 Immobil

isation 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)

12.2. Persistence and degradability

n-nonane (111-84-2)

Persistence and degradability Biodegradable in the soil. Readily biodegradable in

water.

2-ethylhexyl nitrate (27247-96-7)

Persistence and degradability

Not readily biodegradable in water.



cerium dioxide (1306-38-3)

Persistence and degradability Chemical oxygen demand (COD)

ThOD BOD (% of ThOD) Biodegradability: not applicable.

Not applicable Not applicable Not applicable

12.3. Bioaccumulative potential

n-nonane (111-84-2)

BCF other aquatic organisms 1

Partition coefficient n-octanol/water (Log Pow)

Bioaccumulative potential

105 (BCFBAF v3.00, Calculated value)

5.65 (Literature)

High potential for bioaccumulation (Log Kow > 5).

2-ethylhexyl nitrate (27247-96-7)

Partition coefficient n-octanol/water (Log Pow)

Bioaccumulative potential

cerium dioxide (1306-38-3)

Bioaccumulative potential

5.24 (Experimental value, OECD 117: Partition

Coefficient (n-octanol/water), HPLC method)
High potential for bioaccumulation (Log Kow > 5).

No bioaccumulation data available.

12.4. Mobility in soil

n-nonane (111-84-2)

Surface tension

Partition coefficient n-octanol/water (Log Koc)

Ecology - soil

Ecology - soil

22.38 mN/m (25 °C)

2.9 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Low potential for adsorption in soil.

2-ethylhexyl nitrate (27247-96-7)

Partition coefficient n-octanol/water (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) Low potential for mobility in soil.

cerium dioxide (1306-38-3)

Ecology - soil Adsorbs into the soil.

12.5. Results of PBT and vPvB assessment Component

n-nonane (111-84-2)

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

2-ethylhexyl nitrate (27247-96-7)

This substance/mixture meets 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

No additional information available

SECTION 14: TRANSPORT INFORMATION

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

14.1. UN number

 UN-No. (ADR):
 UN 2922

 UN-No. (IMDG):
 UN 2922

 UN-No. (IATA):
 UN 2922

 UN-No. (ADN):
 Not applicable

 UN-No. (RID):
 Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR): CORROSIVE LIQUID, TOXIC, N.O.S.

Proper Shipping Name (IMDG):
Proper Shipping Name (IATA):
Proper Shipping Name (ADN):
Proper Shipping Name (RID):
Not applicable
Not applicable

Transport document description (ADR): UN 2922 CORROSIVE LIQUID, TOXIC, N.O.S., 8

(6.1), III, (E), ENVIRONMENTALLY HAZARDOUS UN 2922, MARINE POLLUTANT/ENVIRONMEN

Transport document description (IMDG): UN 2922, MARINE POTALLY HAZARDOUS

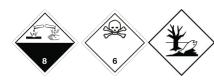
Transport document description (IATA): UN 2922, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR): 8 (6.1)
Danger labels (ADR): 8, 6.1





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):

Packing group (IMDG):

Packing group (IATA):

Packing group (ADN):

Packing group (RID):

Not applicable

Not applicable

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

Classification code (ADR): CT1
Special provisions (ADR): 274
Limited quantities (ADR): 51
Excepted quantities (ADR): E1



Packing instructions (ADR): P001, IBC03, R001

Mixed packing provisions (ADR): MP19
Portable tank and bulk container instructions (ADR): T7

Portable tank and bulk container special

provisions (ADR): TP1, TP28
Tank code (ADR): L4BN
Vehicle for tank carriage: AT
Transport category (ADR): 3
Special provisions for carriage - Packages (ADR): V12

Special provisions for carriage - Loading,

unloading and handling (ADR): CV13, CV28

Hazard identification number (Kemler No.): 86

Orange plates:

86 2922

Tunnel restriction code (ADR): E
EAC code: 2X
APP code: B

Transport by sea

Air transport

No data available

No data available

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 PARLIA-MENT 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

Employment restrictions: Observe restrictions according Act on the Protection

of Working Mothers (MuSchG)

Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)



Water hazard class (WGK): WGK 3, severe hazard to waters (Classification

according to AwSV, Annex 1)

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

(12. BlmSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen:

SZW-lijst van mutagene stoffen:

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Borstvoeding:

NIET-limitatieve lijst van voor de voortplanting

qiftiqe stoffen – Vruchtbaarheid:

NIET-limitatieve liist van voor de voortplanting

giftige stoffen – Ontwikkeling:

None of the components are listed None of the components are listed

None of the components are listed

None of the components are listed

None of the components are listed

Denmark

Classification remarks: Emergency management guidelines for the storage

of flammable liquids must be followed

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

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information 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
Flam. Liq. 3 Flammable liquids, Category 3
Skin Irrit. 2 Skin corrosion/irritation, Category 2

STOT SE 3 Specific target organ toxicity — Single exposure,

Category 3, Narcosis

H226_H_226_EUH302_H_302_EUH304_H_304_EUH312_H_312_EU



H315	_H_315_EU
H332	_H_332_EU
H336	_H_336_EU
H400	_H_400_EU
H410	_H_410_EU
H411	_H_411_EU

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.