



# Restore Diesel Fuel Treatment

## Safety Data Sheet

according to Regulation (EC) No. 453/2010

MSDS Version: E04.00

Date of issue: 18/11/2014

Blend Version: 6

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Restore Diesel Fuel Treatment  
Product code : S10964

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Diesel fuel additive

##### 1.2.2. Uses advised against

No additional information available

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

Groupe Restore - Biral N.V.  
Rue de l'Echauffourée 1  
7700 MOESKROEN (MOUSCRON) - België  
T +32 (0)56 33 38 40 - F +32 (0)56 33 38 07  
[biral.lubricants@laposte.net](mailto:biral.lubricants@laposte.net) - [www.biral-lubricants.be](http://www.biral-lubricants.be)

#### 1.4. Emergency telephone number

Emergency number : BIG: 0032 (0)14 58 45 45

### SECTION 2: Hazards identification

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

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

Asp. Tox. 1 H304  
Aquatic Chronic 3 H412

Full text of H-phrases: see section 16

##### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xn; R65  
R66  
R52/53

Full text of R-phrases: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) : Danger

Hazardous ingredients : hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Hazard statements (CLP) : H304 - May be fatal if swallowed and enters airways  
H412 - Harmful to aquatic life with long lasting effects

EUH phrases : EUH066 - Repeated exposure may cause skin dryness or cracking

Precautionary statements (CLP) : P102 - Keep out of reach of children

P405 - Store locked up

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor

P331 - Do NOT induce vomiting

P273 - Avoid release to the environment

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### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	(EC no) 919-164-8 (REACH-no) 01-2119473977-17	75 - 90	Xn; R65 R66
2-Ethylhexyl nitrate	(CAS No) 27247-96-7 (EC no) 248-363-6 (REACH-no) 01-2119539586-27	5 - 10	Xn; R20/21/22 R44 N; R51/53 R66
Hydrocarbons, C10, aromatics, <1% naphthalene	(EC no) 918-811-1 (REACH-no) 01-2119463583-34	0,1 - 1	N; R51/53 Xn; R65 R66 R67

Name	Product identifier	Specific concentration limits
2-Ethylhexyl nitrate	(CAS No) 27247-96-7 (EC no) 248-363-6 (REACH-no) 01-2119539586-27	(C >= 10) R44

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	(EC no) 919-164-8 (REACH-no) 01-2119473977-17	75 - 90	Asp. Tox. 1, H304 Aquatic Chronic 3, H412
2-Ethylhexyl nitrate	(CAS No) 27247-96-7 (EC no) 248-363-6 (REACH-no) 01-2119539586-27	5 - 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Chronic 2, H411
Hydrocarbons, C10, aromatics, <1% naphthalene	(EC no) 918-811-1 (REACH-no) 01-2119463583-34	0,1 - 1	STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Full text of R- and H-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Vomiting: prevent asphyxia/aspiration pneumonia. Victim in shock: on his back with legs slightly raised. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse immediately with plenty of water. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Ingestion of large quantities: immediately to hospital.

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

Symptoms/injuries after skin contact	: Repeated or prolonged skin contact may cause dermatitis and defatting.
Symptoms/injuries after ingestion	: Headache. Abdominal pain. Harmful if swallowed. Risk of aspiration pneumonia. May be fatal if swallowed and enters airways.

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. AFFF foam. ABC-powder.

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

Fire hazard : Combustible liquid. This material can accumulate static charge by flow or agitation and can be ignited by static discharge.

Explosion hazard : No direct explosion hazard.

### 5.3. Advice for firefighters

Firefighting instructions : Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

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

General measures : Use special care to avoid static electric charges. No naked lights. No smoking.

#### 6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Face-shield. Gloves. protective clothing.

Emergency procedures : Mark the danger area. Seal off low-lying areas. Large spills/in enclosed spaces: compressed air apparatus. Take off contaminated clothing and wash before reuse.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

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

For containment : Contain leaking substance, pump over in suitable containers.

Methods for cleaning up : Take up liquid spill into absorbent material. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Clean with detergents. Avoid solvent cleaners.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : meet the legal requirements. Repeated or prolonged contact with the product may lead to removal of natural fats from the skin. Presents no particular risk when handled in accordance with good occupational hygiene practice.

Hygiene measures : Observe normal hygiene standards. Wash contaminated clothing before reuse.

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

Storage conditions : Meet the legal requirements. Keep container tightly closed. Protect from sunlight. Store in a well-ventilated place.

Storage temperature : < 45 °C

Storage area : Meet the legal requirements. Ventilation at floor level. Keep container tightly closed in a cool, well-ventilated place.

Special rules on packaging : Keep only in original container. correctly labelled.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Italy - Portugal - USA ACGIH TWA (ppm) 100 ppm  
ACGIH

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### 8.2. Exposure controls

Appropriate engineering controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Does not require any specific or particular technical measures.

Personal protective equipment

: Gloves. Safety glasses.



Hand protection

: Neoprene, nitrile. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Appearance	: Clear.
Colour	: Yellow.
Odour	: characteristic.
Odour threshold	: No data available
pH	:
Relative evaporation rate (butylacetate=1)	: No data available
refraction index	: 1,446
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 62 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density @20°C	: 815 kg/m <sup>3</sup>
Solubility	: Insoluble in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic @40°C	: 1,25 mm <sup>2</sup> /s
Viscosity, dynamic @40°C	: No data available
Viscosity	:
Viscosity Index	:
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

VOC content : 97 %

Additional information : The physical and chemical data in this section are typical values for this product and are not intended as product specifications.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

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### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Keep away from strong acids and strong oxidizers.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

On burning: release of harmful/irritant gases/vapours e.g.: carbon monoxide - carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Harmful: may cause lung damage if swallowed.

#### 2-Ethylhexyl nitrate (27247-96-7)

ATE CLP (oral) 500,000 mg/kg bodyweight  
ATE CLP (dermal) 1100,000 mg/kg bodyweight  
ATE CLP (dust,mist) 1,500 mg/l/4h

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : May cause long lasting harmful effects to aquatic life.

Ecology - water : Harmful to aquatic life.

### 12.2. Persistence and degradability

#### 2-Ethylhexyl nitrate (27247-96-7)

Persistence and degradability : Not readily biodegradable in water.

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

#### hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

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 disposal recommendations : Remove to an authorized waste treatment plant.

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### SECTION 14: Transport information

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

#### 14.1. UN number

Not regulated for transport

#### 14.2. UN proper shipping name

Not applicable

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

Not applicable

#### 14.4. Packing group

Not applicable

#### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

##### 14.6.1. Overland transport

No additional information available

##### 14.6.2. Transport by sea

No additional information available

##### 14.6.3. Air transport

No additional information available

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 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 substances with Annex XVII restrictions

Restore Diesel Fuel Treatment is not on the REACH Candidate List

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 97 %

##### 15.1.2. National regulations

Water hazard class (WGK) : 2 - hazard to waters

#### 15.2. Chemical safety assessment

No additional information available

### SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Dermal)

Acute toxicity (dermal), Category 4

Acute Tox. 4 (Inhalation:dust,mist)

Acute toxicity (inhalation:dust,mist) Category 4

Acute Tox. 4 (Oral)

Acute toxicity (oral), Category 4

Aquatic Chronic 2

Hazardous to the aquatic environment — Chronic Hazard, Category 2

Aquatic Chronic 3

Hazardous to the aquatic environment — Chronic Hazard, Category 3

Asp. Tox. 1

Aspiration hazard, Category 1

STOT SE 3

Specific target organ toxicity — Single exposure, Category 3, Narcosis

H302

Harmful if swallowed

H304

May be fatal if swallowed and enters airways

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H312	Harmful in contact with skin
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R44	Risk of explosion if heated under confinement
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R65	Harmful: may cause lung damage if swallowed
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapours may cause drowsiness and dizziness
N	Dangerous for the environment
Xn	Harmful

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*