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

1.1 Product identifier

Trade name: Diesel Additive

This safety data sheet pertains to the following products:
242709 = Diesel Additive
408515 = Diesel Additive

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

General use: Fuel additive. Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company name: Berner Produkten b.v.
Street/POB-No.: Vogelzankweg 175
Postal Code, city: 6374 AC Landgraaf
Netherlands
WWW: www.berner.nl
E-mail: info@berner.nl
Telephone: +31 45 53 39 133

Department responsible for information:
E-mail: Productsafety.Chemicals@berner-group.com

1.4 Emergency telephone number

Poisons information service:
National Poisons Information Service (Birmingham Unit): 844 892 0111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Asp. Tox. 1; H304	May be fatal if swallowed and enters airways.
Aquatic Chronic 3; H412	Harmful to aquatic life with long lasting effects.
(EUH066)	Repeated exposure may cause skin dryness or cracking.

2.2 Label elements

Labelling (CLP)

Signal word: **Danger**

Hazard statements:	H304	May be fatal if swallowed and enters airways.
	H412	Harmful to aquatic life with long lasting effects.
	EUH066	Repeated exposure may cause skin dryness or cracking.
Precautionary statements:	P273	Avoid release to the environment.
	P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
	P331	Do NOT induce vomiting.
	P405	Store locked up.
	P501	Dispose of contents/container to hazardous or special waste collection point.

Special labelling

Text for labelling: Contains:
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Endocrine disrupting properties, Results of PBT and vPvB assessment:
No data available

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Mixture of the substances listed below with non-hazardous additions:

Hazardous ingredients:

Identifiers	Designation Classification	Content
REACH 01-2119457273-39-xxxx list no. 918-481-9 CAS 64742-48-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics Asp. Tox. 1; H304. (EUH066).	50 - 100 %
REACH 01-2119539586-27-xxxx EC No. 248-363-6 CAS 27247-96-7	2-ethylhexyl nitrate Acute Tox. 4; H302. Acute Tox. 4; H312. Acute Tox. 4; H332. Aquatic Chronic 2; H411. (EUH044). (EUH066).	2.5 - 10 %

Full text of H- and EUH-statements: see section 16.

Additional information: Contains: Hydrocarbons, C10, aromatics, <1% naphthalene. The maximum workplace exposure limits are, where necessary, listed in section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: If medical advice is needed, have product container or label at hand. Take off contaminated clothing and wash it before reuse.

In case of inhalation: Remove person to fresh air and keep comfortable for breathing. In the event of discomfort seek medical treatment. If breathing becomes irregular or ceases, apply rescue breathing or artificial respiration immediately, where required supply oxygen.

Following skin contact: Immediately clean with water and soap followed by thorough rinsing. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After swallowing: Rinse mouth with water. Never give anything by mouth to an unconscious person. Caution if victim vomits: Risk of aspiration! Keep airway open. Immediately get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May be fatal if swallowed and enters airways.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Aspiration hazard: in case of swallowing or vomiting danger of penetration into the lungs. Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray jet, Extinguishing powder, alcohol resistant foam, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

May form dangerous gases and vapours in case of fire.
Furthermore, there may develop: carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information: Hazchem-Code: -

Do not allow fire water to penetrate into surface or ground water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe fume/gas/mist/vapours/spray.
Avoid contact with the substance. In case of leakage, eliminate all ignition sources. If possible, eliminate leakage.
Wear appropriate protective equipment. Keep unprotected people away.
Take off contaminated clothing and wash it before reuse.

6.2 Environmental precautions

Do not allow to enter into ground-water, surface water or drains.
In case of release, notify competent authorities.

6.3 Methods and material for containment and cleaning up

Special danger of slipping by leaking/spilling product.
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal.
Dispose of waste according to applicable legislation.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Precautions against fire and explosion:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
When handling larger quantities, take precautionary measures against electrostatic charging.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.
Keep container dry. Keep only in the original container.
Store containers in upright position.

Hints on joint storage: Keep away from food, drink and animal feedingstuffs.
Do not store together with: oxidizing agents, strong acids, strong bases

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
64742-48-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	Great Britain: WEL-TWA	1200 mg/m³ (> or = C7, Normal and branched chain alkanes)
		Great Britain: WEL-TWA	800 mg/m³ (> or = C7, Cycloalkanes)
64742-94-5	Hydrocarbons, C10, aromatics, <1% naphthalene	Great Britain: WEL-TWA	500 mg/m³ (Aromatics)

8.2 Exposure controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment.

Personal protection equipment

Occupational exposure controls

Respiratory protection: In case of inadequate ventilation wear respiratory protection.
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.

Hand protection: Protective gloves according to EN 374.
Glove material: Nitrile rubber - Layer thickness: ≥ 0.35 mm.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to BS EN ISO 16321-1:2022.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:
Do not breathe fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Take off contaminated clothing and wash it before reuse. Keep away from food, drink and animal feedingstuffs. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Physical state at 20 °C and 101.3 kPa: liquid
Colour: colourless

Odour: Characteristic

Odour threshold: No data available

pH: No data available

Melting point/freezing point: No data available

Initial boiling point and boiling range: > 100 °C

Flash point/flash point range:	62 °C
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	LEL (Lower Explosion Limit): 0.60 Vol-% UEL (Upper Explosive Limit): 7.00 Vol-%
Vapour pressure:	at 20 °C: 1 hPa (-)
Vapour density:	No data available
Density:	at 20 °C: 0.81 g/mL (-)
Water solubility:	Insoluble (-)
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	Not self-igniting
Decomposition temperature:	No data available
Viscosity, kinematic:	at 40 °C: 7 mm²/s (-)
Explosive properties:	Product is not explosive.
Oxidizing characteristics:	Not oxidising.

9.2 Other information

Ignition temperature:	> 200 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

Refer to subsection "Possilbility of hazardous reactions".

10.2 Chemical stability

Violent reaction with oxidizing agents, strong acids, strong bases

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Keep away from heat sources, sparks and open flames.
Protect from direct sunlight.

10.5 Incompatible materials

oxidizing agents, strong acids, strong bases

10.6 Hazardous decomposition products

No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition:	No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological effects:

The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.
ATEmix (calculated): 10,909 mg/kg

Acute toxicity (dermal): Based on available data, the classification criteria are not met.
ATEmix (calculated): 12,500 mg/kg

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
ATEmix (calculated): 125 mg/m³

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.

Skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

Aspiration hazard: Asp. Tox. 1; H304 = May be fatal if swallowed and enters airways.

Other information:

Information about Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics:
LD50 Rat, oral: > 15,000 mg/kg bw
LD50 Rabbit, dermal: > 3,160 mg/kg bw
LC50 Rat, inhalative: > 6,100 mg/m³/4h

Information about 2-ethylhexyl nitrate:
LD50 Rat, oral: > 10 mL/kg bw
LDLo Rabbit, dermal: > 5 mL/kg bw
LCLo Rat, inhalative: > 4.6 mg/L/75 min

Information about Hydrocarbons, C10, aromatics, <1% naphthalene:
LD50 Rat, oral: > 5,000 mg/kg (OECD 401)
LD50 Rabbit, dermal: > 2,000 mg/kg (OECD 402)

Symptoms

After contact with skin: Repeated exposure may cause skin dryness or cracking.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects.

Information about Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics:
Fish toxicity:
LL50 Oncorhynchus mykiss: > 1,000 mg/L/96h (OECD 203)
NOELR Oncorhynchus mykiss: 0.101 mg/L/28d
Daphnia toxicity:
LL50 Daphnia magna (Big water flea): > 1,000 mg/L/48h
NOELR Daphnia magna (Big water flea): 0.176 mg/L/21d
Algae toxicity:
EL50 Pseudokirchneriella subcapitata (green algae): >1,000 mg/L/72h

Information about 2-ethylhexyl nitrate:
Fish toxicity:
LC50 Danio rerio (zebrafish): 2 mg/L/96h
Daphnia toxicity:
EC50 Daphnia magna (Big water flea): > 12.6 mg/L/48h
Algae toxicity:
EC50 Pseudokirchneriella subcapitata (green algae): 3.22 mg/L/72h

Information about Hydrocarbons, C10, aromatics, <1% naphthalene:
Fish toxicity:
LL50 Oncorhynchus mykiss: 2 - 5 mg/L/96h
Daphnia toxicity:
EL50 Daphnia magna (Big water flea): 3 - 10 mg/L/48h
Algae toxicity:
ErL50 Pseudokirchneriella subcapitata (green algae): 11 mg/L/72h
NOELR Pseudokirchneriella subcapitata (green algae): 2.5 mg/L/72h

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:
No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.
Avoid spills and leaks. Very small amounts contaminates drinking water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 14 06 03* = other solvents and solvent mixtures
* = Evidence for disposal must be provided.

Recommendation: Do not dispose of with household waste. Do not allow to enter into ground-water, surface water or drains.

Package

Recommendation: Dispose of waste according to applicable legislation. Handle contaminated packages in the same way as the substance itself. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR: not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR: Not restricted

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR: not applicable

14.4 Packing group

ADR/RID, IMDG, IATA-DGR: not applicable

14.5 Environmental hazards

Marine pollutant: no

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

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

No data available

SECTION 15: Regulatory information

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

National regulations - Great Britain

Hazchem-Code: -

No data available

National regulations - EC member states

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Further information

Wording of the H-phrases under paragraph 2 and 3:

H302 = Harmful if swallowed.
H304 = May be fatal if swallowed and enters airways.
H312 = Harmful in contact with skin.
H332 = Harmful if inhaled.
H411 = Toxic to aquatic life with long lasting effects.
H412 = Harmful to aquatic life with long lasting effects.
EUH044 = Risk of explosion if heated under confinement.
EUH066 = Repeated exposure may cause skin dryness or cracking.

Abbreviations and acronyms:
Acute Tox.: Acute toxicity
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
Aquatic Chronic: Hazardous to the aquatic environment - chronic
AS/NZS: Australian Standards/New Zealand Standards
Asp. Tox.: Aspiration toxicity
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EC50: Effective Concentration 50%
EL50: Effective loading rate 50%
EN: European Standard
EQ: Excepted quantities
IATA: International Air Transport Association
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
LC50: Median lethal concentration
LD50: Lethal dose 50%
LDLo: Lethal dose low
LEL: Lower Explosion Limit
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
TRGS: Technical Rules for Hazardous Substances
vPvB: Very persistent and very bioaccumulative

Reason of change: General revision

Date of first version: 7/9/2021

Department issuing data sheet

Contact person: see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.