Safety Data Sheet

according to Regulation (EC) No 1907/2006

HIGHTEC Diesel-Systemschutz

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

1.1. Product identifier

HIGHTEC Diesel-Systemschutz

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

Use of the substance/mixture

Additive

1.3. Details of the supplier of the safety data sheet

Company name:	ROWE MINERALOELWERK GMBH	
Street:	Langgewann 101	
Place:	D-67547 Worms	
Telephone:	+49 (0)6241 5906-0	Telefax: +49 (0)6241 5906-999
e-mail:	info@rowe-mineraloel.com	
Internet:	www.rowe-mineraloel.com	
Responsible Department:	Kundenservice	

1.4. Emergency telephone number:

Giftnotruf Mainz (DE; E) +49 (0)6131-19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Aspiration hazard: Asp. Tox. 1
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Dam. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 3
Hazard Statements:
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.
Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Distillates (petroleum), hydrotreated light, Kerosine - unspecified
2-methylpropan-1-ol; iso-butanol
2-ETHYL-1-HEXANOL

Signal word: Danger

Pictograms:

Hazard statements

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331	Do NOT induce vomiting.
P405	Store locked up.
P501	Dispose of contents/container to of the disposal according to local regulations.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
64742-47-8	Distillates (petroleum), hydrotreated light, Kerosine - unspecified			60 - <= 100 %
	265-149-8	649-422-00-2	01-2119484819-18	
	Asp. Tox. 1; H304			
78-83-1	2-methylpropan-1-ol; iso-butanol			1-10 %
	201-148-0	603-108-00-1		
	Flam. Liq. 3, STOT SE 3, Skin Irrit. 2, Eye Dam. 1, STOT SE 3; H226 H335 H315 H318 H336			
27247-96-7	2-ETHYLHEXYL NITRATE			1-10 %
	248-363-6		01-2119539586-27	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Aquatic Chronic 2; H332 H312 H302 H411			
104-76-7	2-ETHYL-1-HEXANOL			1-10 %
	203-234-3		01-2119487289-20	
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H332 H315 H319 H335			
91-20-3	naphthalene			<1 %
	202-049-5	601-052-00-2	01-2119561346-37	
	Carc. 2, Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1; H351 H302 H400 H410			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water.

Call a physician in any case!

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

Frequently or prolonged contact with skin may cause dermal 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

Co-ordinate fire-fighting measures to the fire surroundings. Carbon dioxide. Extinguishing powder. alcohol resistant foam.

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Remove all sources of ignition.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep only in the original container in a cool, well-ventilated place. Floors should be impervious, resistant to liquids and easy to clean. Keep away from

sources of ignition - No smoking.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Additive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
78-83-1	2-Methylpropan-1-ol	50	154		TWA (8 h)	WEL
		75	231		STEL (15 min)	WEL
104-76-7	2-ethylhexan-1-ol	1	5.4		TWA (8 h)	EU
91-20-3	Naphthalene	10	50		TWA (8 h)	EU

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary . When using do not eat or drink.

Eye/face protection

Suitable eye protection: goggles. Tightly sealed safety glasses.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Wear suitable gloves.

Skin protection

Protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. With correct and proper use, and under normal conditions, breathing protection is not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	brightgolden
Odour:	Alcohol.
pH-Value:	not determined

Changes in the physical state

Melting point:	<0 °C
Initial boiling point and boiling range:	160-260 °C
Flash point:	64 °C

Flammability

Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	1,1 vol. %
Upper explosion limits:	6,5 vol. %
Ignition temperature:	>200 °C

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidizing.

Vapour pressure:	not determined
Density (at 15 °C):	0,802 g/cm³
Water solubility:	sparingly soluble.

Solubility in other solvents

miscible with most organic solvents

Partition coefficient:	not determined
Viscosity / kinematic: (at 40 °C)	1,81 mm²/s
Vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

This product is stable under normal conditions. Hazardous reactions are unlikely.

10.2. Chemical stability

This product is stable under normal conditions. Hazardous reactions are unlikely.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Remove all sources of ignition.

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-47-8	Distillates (petroleum), hydrotreated light, Kerosine - unspecified				
	oral	LD50 >5000 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rabbit		
	inhalation (4 h) aerosol	LC50 >5.28 mg/l	Rat		
78-83-1	2-methylpropan-1-ol; iso-butanol				
	oral	LD50 > 2830 mg/kg	Rat		
	dermal	LD50 > 2000 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 > 24 mg/l	Rat		
27247-96-7	2-ETHYLHEXYL NITRATE				
	oral	ATE 500 mg/kg			
	dermal	ATE 1100 mg/kg			
	inhalation (1 h) vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			
104-76-7	2-ETHYL-1-HEXANOL				
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			
91-20-3	naphthalene				
	oral	ATE 500 mg/kg			

Additional information on tests

The mixture is classified as hazardous according to Directive 1999/45/EC.

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
78-83-1	2-methylpropan-1-ol; iso-butanol						
	Acute fish toxicity	LC50 mg/l	1430	96 h	Pimephales promelas		
	Acute algae toxicity	ErC50 mg/l	1250		Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 mg/l	1439	48 h	Daphnia magna		
27247-96-7	2-ETHYLHEXYL NITRATE						
	Acute fish toxicity	LC50	2 mg/l	96 h	Brachydanio rerio (zebra-fish)		
	Acute algae toxicity	ErC50 mg/l	1-10	72 h			
	Acute crustacea toxicity	EC50	>10 mg/l	48 h	Daphnia magna		

12.2. Persistence and degradability

Product is partially biodegradable.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
27247-96-7	2-ETHYLHEXYL NITRATE			
		0%	28	

12.3. Bioaccumulative potential

Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
78-83-1	2-methylpropan-1-ol; iso-butanol	0,79
27247-96-7	2-ETHYLHEXYL NITRATE	3,74-5,24

BCF

CAS No	Chemical name	BCF	Species	Source
27247-96-7	2-ETHYLHEXYL NITRATE	1332		

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Send to a physico-chemical treatment facility under observation of official regulations. Following consultation with waste management company and after physico-chemical pre-treatment, landfill together with household waste.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3: 2-methylpropan-1-ol; iso-butanol

2010/75/EU (VOC):	10 % (80,2 g/l)
2004/42/EC (VOC):	10 % (80,2 g/l)

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Water contaminating class (D):	2 - clearly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singulary responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)