Safety Data Sheet

according to Regulation (EC) No 1907/2006

HIGHTEC OCTANE BOOSTER

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

1.1. Product identifier

HIGHTEC OCTANE BOOSTER

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

Use of the substance/mixture

Gasoline-Additive

1.3. Details of the supplier of the safety data sheet

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

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 Irrit. 2
Hazardous to the aquatic environment: Aquatic Chronic 3
Hazard Statements:
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Hydrocarbons, C10-C13, n-alkanes,
Solvent naphtha (petroleum), aromatics heavy
Methylcyclopentadienyl manganese tricarbonyl

Signal word: Danger

Pictograms:

Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P501	Dispose of contents/container to of the disposal according to local regulations.

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.
P102	Keep out of reach of children.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

2.3. Other hazards

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Reiniger (Cleaner)

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
1174522-09-8	Hydrocarbons, C10-C13, n-alkanes,			70-90 %
	918-481-9		01-2119457273-39	
	Asp. Tox. 1; H304 EUH066			
104-76-7	2-ETHYL-1-HEXANOL			10-30 %
	203-234-3		01-2119487289-20	
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
64742-94-5	Solvent naphtha (petroleum), aromatics heavy			1-10 %
	265-198-5	649-424-00-3	01-2119451151-53	
	Asp. Tox. 1, Aquatic Chronic 2; H304 H411			
	POLYOLEFIN ALKYLPHENOL ALKYL AMIN			1-10 %
	Skin Irrit. 2; H315			
12108-13-3	Methylcyclopentadienyl manganese tricarbonyl			<1 %
	235-166-5		01-2119495971-23	
	Acute Tox. 1, Acute Tox. 2, Acute Tox. 3, STOT RE 1, Aquatic Acute 1; H330 H310 H301 H372 H400			
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

Move victim out of danger zone. If unconscious place in recovery position and seek medical advice.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary. After contact

with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing, including underwear and shoes .

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. In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. Medical treatment necessary. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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

No information available.

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 (CO2). Extinguishing powder. Water spray. alcohol resistant foam.

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air. Formation of explosive mixtures with: Air. Special exposure hazards arising from the substance itself, combustion products, resulting gases: Carbon dioxide (CO2). Carbon monoxide Harmful.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit. In case of fire: Wear self-contained breathing apparatus. Wear personal protection equipment.

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. Wear personal protection equipment. Remove all sources of ignition.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

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. 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. Ensure adequate ventilation of the storage area. Keep away from sources of ignition - No smoking.

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 locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep away from sources of ignition - No smoking. Keep container tightly closed. Floors should be impervious, resistant to liquids and easy to clean. Protect from sunlight.

Hints on joint storage

No special measures are necessary.

Further information on storage conditions

Keep only in the original container.

7.3. Specific end use(s)

Gasoline-Additive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
104-76-7	2-ethylhexan-1-ol	1	5.4		TWA (8 h)	WEL
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. Ensure adequate ventilation of the storage area. Remove all sources of ignition. Floors should be impervious, resistant to liquids and easy to clean.

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. penetration time (maximum wearing period): 4h

Skin protection

Wear suitable protective clothing. Protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. exceeding exposure limit values: gas filtering equipment (EN 141). In case of fire: Wear self-contained breathing apparatus.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	yellow orange
Odour:	characteristic

		Test method
pH-Value:	not determined	
Changes in the physical state		
Melting point:	~ -22 °C	
Initial boiling point and boiling range:	~ 175-230 °C	
Flash point:	~ 62 °C	
Flammability		
Solid:	not applicable	
Gas:	not applicable	
Lower explosion limits:	0.5 vol. %	
Upper explosion limits:	7.0 vol. %	
Ignition temperature:	>200 °C	
Auto-ignition temperature		
Solid:	not applicable	
Gas:	not applicable	
Decomposition temperature:	not determined	
Oxidizing properties		
Not oxidising.		
Vapour pressure:	not determined	
Density (at 15 °C):	~ 0,803 g/cm³	DIN 51757
Water solubility:	Immiscible	
Solubility in other solvents		
miscible with most organic solvents		
Partition coefficient:	VOC g/l: 803	
Viscosity / kinematic: (at 40 °C)	1,7 mm²/s	DIN EN ISO 3104
Vapour density:	not determined	
Evaporation rate:	not determined	

9.2. Other information

Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

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

Reducing agent. Oxidizing agents, strong.

10.6. Hazardous decomposition products

Special exposure hazards arising from the substance itself, combustion products, resulting gases: Carbon dioxide (CO2). Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

ATEmix calculated

ATE (inhalation vapour) 5,56 mg/l; ATE (inhalation aerosol) 0,556 mg/l

Acute toxicity

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
1174522-09-8	Hydrocarbons, C10-C13, n-alkanes,					
	oral	LD50	>5000 mg/kg	Rat	OECD-Richtlinien 401	
	dermal	LD50	>5000 mg/kg	Rabbit	OECD-Richtlinien 402	
	inhalation (4 h) vapour	LC50	4951 mg/l	Rat	OECD-Richtlinien 403	
64742-94-5	Solvent naphtha (petroleum), aromatics heavy					
	inhalation vapour	LC50	>590 mg/l	Rat		
12108-13-3	Methylcyclopentadienyl manganese tricarbonyl					
	oral	ATE	100 mg/kg			
	dermal	ATE	50 mg/kg			
	inhalation vapour	ATE	0,05 mg/l			
	inhalation aerosol	ATE	0,005 mg/l			
91-20-3	naphthalene					
	oral	ATE	500 mg/kg			

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

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
1174522-09-8	Hydrocarbons, C10-C13, n-alkanes,						
	Acute fish toxicity	LC50 mg/l	1000	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 mg/l	1000	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 mg/l	1000	48 h	Daphnia magna		
64742-94-5	Solvent naphtha (petroleum), aromatics heavy						
	Acute fish toxicity	LC50	2-5 mg/l	96 h			
	Acute crustacea toxicity	EC50 mg/l	3-10	48 h			

12.2. Persistence and degradability

Product is partially biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

BCF

CAS No	Chemical name	BCF	Species	Source
64742-94-5	Solvent naphtha (petroleum), aromatics heavy	<100		

12.4. Mobility in soil

Vapours are heavier than air and will spread at floor level.

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.

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

Disposal recommendations

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.

List of Wastes Code - residues/unused products

130703 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); wastes of liquid fuels; other fuels (including mixtures); hazardous waste

List of Wastes Code - used product

130703 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); wastes of liquid fuels; other fuels (including mixtures); hazardous waste

Contaminated packaging

This material and its container must be disposed of as hazardous waste. 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 28: Hydrocarbons, C10-C13, n-alkanes,

2004/42/EC (VOC):	803 g/l
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	2 - obviously hazardous to water

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): 9.

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 Irrit. 2; H319	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H310	Fatal in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly 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.)