ENGINE FLUSH

Product code: 77009

Issue date: 07/03/2013
Revision date: 12/11/2024
Supersedes version of: 28/10/2024
Version: 7.0

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

1.1 Product identifier
Product form: Mixture
Product name: 77 Lubricants Engine Flush
Product code: 77009

1.2 Relevant identified uses of the substance or mixture and uses advised against - Relevant identified uses
Intended for general public
Main use category: Industrial use,Professional use,Consumer use
Function or use category: Lubricants and additives

1.3 Details of the supplier of the safety data sheet
· **Manufacturer/Supplier:**
· Petromark Automotive Chemicals B.V.
· Rooswijkweg 316
· 1951 ME Velsen-Noord – Nederland
· Tel +31 251 211397
· info@petromark.eu

· **1.4 Emergency telephone number:** Tel: +31 251 211397

Country/ Area	Organisation/Company	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)

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SECTION 2: HAZARDS IDENTIFICATION.

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Adverse physicochemical, human health and environmental effects
To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
EUH-statements: EUH210 - Safety data sheet available on request.

2.3. Other hazards
Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated heavy paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH, TR); substance with a Community workplace exposure limit (Note L)	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627-25	≥ 90	Not classified

Note L: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 ("Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions – Dimethyl sulphoxide extraction refractive index method" Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

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SECTION 4: FIRST AID MEASURES.

4.1. Description of first aid measures

First-aid measures general: If you feel unwell, seek medical advice.

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact: Wash contaminated clothing before reuse. Wash skin with plenty of water.

First-aid measures after eye contact: Rinse eyes with water as a precaution.

First-aid measures after ingestion: Get immediate medical advice/attention. Call a poison center or a doctor if you feel unwell.

Self protection of the first-aider: First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after inhalation: After adequate first aid, no further treatment is required unless symptoms reappear.

Symptoms/effects after skin contact: After adequate first aid, no further treatment is required unless symptoms reappear.

Symptoms/effects after eye contact: After adequate first aid, no further treatment is required unless symptoms reappear.

Symptoms/effects after ingestion: After adequate first aid, no further treatment is required unless symptoms reappear.

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

Obtain medical assistance. Ingestion of large quantities: immediately to hospital. Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES.

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5.1 Extinguishing media

Suitable extinguishing media: Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media: Do not use a water jet since it may cause the fire to spread. 5.2. Special hazards arising from the substance or mixture

Fire hazard: On burning: release of carbon monoxide - carbon dioxide.

Explosion hazard: No direct explosion hazard.

Reactivity in case of fire: Possibility of hazardous reactions.

Hazardous decomposition products in case of fire: Toxic fumes may be released. 5.3. Advice for firefighters

Precautionary measures fire: Evacuate area. Fight fire remotely due to the risk of explosion. Stop leak if safe to do so.

Firefighting instructions: Use water spray or fog for cooling exposed containers. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information: Cool down the containers exposed to heat with a water spray.

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SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures

General measures: Avoid spilling the product, as this might cause falls. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment: Wear recommended personal protective equipment.

Emergency procedures: Ventilate spillage area.

For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. Eliminate all ignition sources if safe to do so. Wear suitable protective clothing, gloves and eye/face protection. For further information refer to section 8: “Exposure controls/personal protection”.

Emergency procedures: Stop release. Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up: Take up liquid spill into absorbent material. Absorb spillage to prevent material damage. Large spills: scoop solid spill into closing containers. This material and its container must be disposed of in a safe way, and as per local legislation.

Other information: Provide for a tub to collect spills. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling

Additional hazards when processed:	Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling:	Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes.
Hygiene measures:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Technical measures:	Provide local exhaust or general room ventilation.
Storage conditions:	Keep cool. Protect from sunlight.
Incompatible products:	Oxidizing agent.
Incompatible materials:	Do not allow contact with water.
Storage temperature:	≤ 40 °C
Storage area:	Store in a well-ventilated place. Store away from heat.
Special rules on packaging:	Keep only in original container. Store in a closed container.
Packaging materials:	Store always product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters

National occupational exposure and biological limit values

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³
IOEL STEL	10 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	5 ppm Form: inhalable fraction

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8.2. Exposure controls
Appropriate engineering controls
Ensure good ventilation of the work station.
Personal protection equipment
Gloves. Safety glasses. Protective clothing.
Personal protective equipment symbol(s):

Eye and face protection
Eye protection:
Safety glasses

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety glasses	Droplet	clear	EN 166

Skin protection
Skin and body protection:
Avoid prolonged and repeated contact with skin. If repeated skin contact or contamination of clothing is likely, protective clothing should be worn

Hand protection:
Protective gloves

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Reusable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	6 (> 480 minutes)	>0.35		EN ISO 374

Respiratory protection
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls
Environmental exposure controls:
Avoid release to the environment.

Other information:
Do not wear leather soled shoes.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	light brown.
Odour:	characteristic.
Odour threshold:	Not available
Melting point:	Not applicable
Freezing point:	-24 °C (ASTM D7346)
Boiling point:	Not available
Flammability:	Non flammable.
Lower explosion limit:	Not available
Upper explosion limit:	Not available
Flash point:	> 200 °C (ASTM D92)
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
pH:	Not available
Viscosity, kinematic:	32.2 mm^2/s @ 40°C (ASTM D7042)
Solubility:	insoluble in water.
Partition coefficient n-octanol/water (Log Kow):	Not available
Vapour pressure:	Not available
Vapour pressure at 50°C:	Not available
Density:	881 kg/m^3 @ 15°C (ASTM D4052)
Relative density:	Not available
Relative vapour density at 20°C:	Not available
Particle characteristics:	Not applicable

9.2 Other information

Other safety characteristics	
Additional information:	None.

SECTION 10: STABILITY AND REACTIVITY.

10.1. Reactivity	None.
10.2. Chemical stability	The product is stable at normal handling and storage conditions.
10.3. Possibility of hazardous reactions	None.
10.4. Conditions to avoid	None under recommended storage and handling conditions (see section 7).
10.5. Incompatible materials	Oxidizing agent.
10.6. Hazardous decomposition products	None.

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SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral): Not classified
Acute toxicity (dermal): Not classified
Acute toxicity (inhalation): Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LD50 oral (rat)	> 5000 mg/kg 401 Acute Oral Toxicity Test
LD50 dermal (rabbit)	> 5000 mg/kg 402 Acute Dermal Toxicity Test
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5 mg/l/4h 403 Acute Inhalation Toxicity Test

Skin corrosion/irritation: No other effects known
Serious eye damage/irritation: Data not validated
Respiratory or skin sensitisation: No other effects known
Germ cell mutagenicity: No other effects known
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
STOT-single exposure: Not classified
STOT-repeated exposure: Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Aspiration hazard: Not classified

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Viscosity, kinematic	32.2 mm²/s @ 40°C (ASTM D7042)

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Viscosity, kinematic	20.8 mm²/s @ 40°C

11.2. Information on other hazards

No additional information available

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SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity

Ecology - general: No data available.
Hazardous to the aquatic environment, short–term (acute): Not classified
Hazardous to the aquatic environment, long–term (chronic): Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LC50 - Fish [1]	> 100 mg/l Pimephales promelas
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna
NOEC chronic fish	1000 mg/l Oncorhynchus mykiss (14d)
NOEC chronic crustacea	10 mg/l Daphnia magna (21d)
NOEC chronic algae	≥ 100 mg/l Pseudokirchneriella subcapitata

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Persistence and degradability No data available.

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)
Persistence and degradability Not rapidly degradable
Biodegradation < 31 % OECD TG 301 F (28d)

12.3. Bioaccumulative potential

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Bioaccumulative potential No data available.

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)
Partition coefficient n-octanol/water (Log Pow) 2 – 6

12.4. Mobility in soil

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Ecology - soil

12.5. Results of PBT and vPvB assessment No additional information available
12.6. Endocrine disrupting properties No additional information available
12.7. Other adverse effects No additional information available

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SECTION 13: DISPOSAL CONSIDERATIONS.

13.1. Waste treatment methods

Regional waste regulation: Disposal must be done according to official regulations.

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations: Disposal must be done according to official regulations.

Product/Packaging disposal recommendations: Dispose of contents/container to Dispose in a safe manner in accordance with local/national regulations. Disposal must be done according to official regulations.

Additional information: Do not re-use empty containers.

European List of Waste (LoW, EC 2000/532): 13 02 05* - mineral-based non-chlorinated engine, gear and lubricating oils

SECTION 14: TRANSPORT INFORMATION.

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

14.6. Special precautions for user

Overland transport No data available

Transport by sea No data available

Air transport No data available

Inland waterway transport No data available

Rail transport No data available

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14.7. Maritime transport in bulk according to IMO instruments
Not applicable

SECTION 15: REGULATORY INFORMATION.

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

EU-Regulations
Other information, restriction and prohibition regulations: Ensure all national/local regulations are observed.

REACH Annex XVII (Restriction List)
Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)
Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)
Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items
Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (EU 2019/1148)
Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)
Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

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SECTION 16: OTHER INFORMATION.

Indication of changes:
Revised safety data sheet in accordance with commisssion regulation (EU) No 453/2010.

Indication of changes		
Section	**Changed item**	**Comments**
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	**Added**
2.2	EUH-statements	**Modified**
2.2	Hazard statements (CLP)	**Added**
2.2	Precautionary statements (CLP)	**Added**

Abbreviations and acronyms:

ACGIH	American Conference of Government Industrial Hygienists
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
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration

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NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

Full text of H- and EUH-statements:

EUH210	Safety data sheet available on request.

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