

MATERIAL SAFETY DATA SHEET**XENUM X-FLUSH**

according to Regulation (EC) No 1907/2006

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1. Product identifier:** XENUM X-FLUSH**Product code:** 3062500 - 3062005**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture:**

Additive for diesel engines.

1.3. Details of the supplier of the safety data sheet**Manufacturer/Supplier:** XENUM N.V.
Steenkaaistraat 17
B – 9200 Dendermonde
Tel: +32 52 22 38 08
Fax: +32 52 22 51 60
e-mail: info@xenum.eu**Contact Person:** Peter Tossyn**1.4. Emergency telephone number:**

During normal opening hours: +32 479 82 08 08

2. HAZARDS IDENTIFICATION**2.1. Classification of the substance or mixture**Indications of danger: Xn - HarmfulR phrases:

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

Harmful: may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking.

GHS classificationHazard categories:

Acute toxicity: Acute Tox. 4

Acute toxicity: Acute Tox. 3

Acute toxicity: Acute Tox. 3

Aspiration hazard: Asp. Tox. 1

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Harmful if swallowed.

May be fatal if swallowed and enters airways.

Toxic in contact with skin or if inhaled.

Harmful to aquatic life with long lasting effects.

2.2. Label elements**Hazardous components which must be listed on the label**

Low boiling point hydrogen treated naphtha, Naphtha (petroleum), hydrotreated heavy Solvent Naphtha (mineral oil), heavy arom.

Signal word: Danger

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Pictograms:

GHS06-GHS08



Hazard statements

H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H311+H331 Toxic in contact with skin or if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P331 Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.

Special labelling of certain mixtures

Operate if possible out of doors or in a well-ventilated place.

Additional advice on labelling

Product is classified and labelled in accordance with EC regulations or the corresponding national laws.

2.3. Other hazards

Prolonged/repetitive skin contact may cause skin defatting or dermatitis. The components in this formulation do not meet the criteria for classification as PBT or vPvB .

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Chemical characterization: Mixture of substances listed below with nonhazardous additions.

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
265-150-3	Low boiling point hydrogen treated naphtha, Naphtha (petroleum), hydrotreated heavy	70 - < 75 %
64742-48-9	Xn - Harmful R65-66 Asp. Tox. 1; H304	
265-198-5	Solvent Naphtha (mineral oil), heavy arom.	1 - < 5 %
64742-94-5	Xn - Harmful, N - Dangerous for the environment R51-53-65-66-67 Asp. Tox. 1, STOT SE 3, Aquatic Chronic 2; H304 H336 H411	
202-049-5	naphthalene	< 1 %
91-20-3	Carc. Cat. 3, Xn - Harmful, N - Dangerous for the environment R40-22-50-53	
601-052-00-2	Carc. 2, Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1; H351 H302 H400 H410	
265-198-5	Solvent Naphtha (mineral oil), heavy arom.	< 1 %
64742-94-5	Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R37/38-51-53-65 STOT SE 3, Skin Irrit. 2, Asp. Tox. 1, Aquatic Chronic 2; H335 H315 H304 H411	

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Full text of R and H phrases: see Section 16.

4. FIRST AID MEASURES

4.1. Description of first aid measures

- General information:** If victim is at risk of losing consciousness, position and transport on their side. Provide fresh air.
- After inhalation:** Move victim to fresh air. Put victim at rest and keep warm.
- After contact with skin:** After contact with skin, wash immediately with: Water and soap.
- After contact with eyes:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- After ingestion:** Give nothing to eat or drink. Do not induce vomiting.

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

Following symptoms can occur: Allergic reactions.

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

Hazards identification: Lung irritation.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

- Suitable extinguishing media:** Extinguishing powder. Carbon dioxide (CO₂). Sand.
- Extinguishing media which must not be used for safety reasons:** High power water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire and/or explosion do not breathe fumes. Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide.

- 5.3. Advice for firefighters** In case of fire: Wear self-contained breathing apparatus.

Additional information: Extinguishing materials should be selected according to the surrounding area. Fire class B: Burning liquid or melting substances. Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Keep away from unprotected people. Keep upwind. Wear personal protection equipment. (refer to chapter 8) Eliminate all ignition sources if safe to do so.

6.2. Environmental precautions:

Spilled product must not leak into the ground. Do not empty into drains or the aquatic environment. In case of gas being released or leakage into waters, ground or the drainage system, the appropriate authorities must be informed.

6.3. Methods and material for containment and cleaning up:

Suitable absorbing material: diatomaceous earth. Do not rinse down with water.

6.4. Reference to other sections:

See protective measures under point 7 and 8.

Treat the assimilated material according to the section on waste disposal.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling Provide for sufficient ventilation and punctiform suction at critical points.

Advice on protection against fire and explosion:

In case of open handling, use devices with built-in suction where possible. In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. It is possible that in the head space of sealed containers, especially in the case of thermal development, vapours of solvent cleaners may accumulate. Flames and sources of ignition must be kept well away.

Further information on handling:

Avoid contact with skin and eyes.

Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

Store only in original container.

Advice on storage compatibility:

Keep away from food, drink and animal feedingstuffs. Keep away from sources of ignition – No smoking.

Further information on storage conditions:

Suitable material for floor covering: Solvent-proof.

7.3. Specific end use(s)

Observe technical data sheet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
64742-48-9	Low boiling point hydrogen treated naphtha, Naphtha (petroleum), hydrotreated heavy	200	1000		TWA (8 h) STEL (15 min)	
91-20-3	Naphthalene	10 -	50 -		TWA (8 h) STEL (15 min)	EU EU

8.2. Exposure controls



Occupational exposure controls

Refer to chapter 7. No further action is necessary.

Protective and hygiene measures

Do not eat, drink, smoke or sneeze at the workplace.

Street clothing should be stored separately from work clothing.

Eye/face protection

Suitable eye protection: Tightly sealed safety glasses. gemäß DIN EN 166

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Hand protection	<p>Tested protective gloves are to be worn: nach DIN EN 374</p> <p>Suitable material: NBR (Nitrile rubber). Thickness of glove material:: 0,45 mm; penetration time (maximum wearing period): 480 min</p> <p>NR (Natural rubber (Caoutchouc), Natural latex). Thickness of glove material:: 0,45 mm; penetration time (maximum wearing period): 10 min</p> <p>CR (polychloroprenes, Chloroprene rubber). Thickness of glove material:: 0,75 mm; penetration time (maximum wearing period): 60 min</p> <p>Additional protection measures for the hands: Before using check leak tightness / impermeability.</p>
Skin protection	Wear suitable protective clothing.
Respiratory protection	Respiratory protection required in case of: insufficient absorption. und prolonged action. gas filtering equipment (EN 141). A2 (brown) Only use breathing apparatus with CE-label including the four-digit identification number.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	colourless	
Odour:	characteristic	
		Test method
pH-Value:	Not applicable.	
Changes in the physical state		
Melting point:	< 0 °C	
Initial boiling point and boiling range:	178 °C	DIN 53171
Flash point:	63 °C	DIN 51755
Flammability		
Solid:	Undetermined.	
Gas:	Undetermined.	
Explosive properties		
Lower explosion limits:	0,6 vol. %	DIN 51649
Upper explosion limits:	7 vol. %	DIN 51649
Ignition temperature:	236 °C	DIN 51794
Auto-ignition temperature		
Solid:	200 °C	
Gas:	Undetermined.	
Decomposition temperature:	Undetermined.	
Oxidizing properties		
Vapour pressure (at 20 °C):	not oxidizing.	
Density (at 20 °C):	0,1 hPa	
Water solubility (at 20 °C):	0,805 g/cm ³	DIN 51757
Partition coefficient:	not miscible	
Viscosity / kinematic (at 40 °C):	Undetermined.	
Flow time:	0,7 mm ² /s	
Vapour density:		3 DIN EN ISO 2431
Evaporation rate (at 20 °C):	Undetermined.	
	Undetermined.	

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9.2. Other information

Solid content: 0,95 %

10. STABILITY AND REACTIVITY**10.1. Reactivity** In case of warming: Explosion hazard.**10.2. Chemical stability** The product is stable.**10.3. Possibility of hazardous reactions**
In case of warming: Explosion hazard.**10.4. Conditions to avoid** heat.
In case of warming: Risk of selfignition.**10.5. Incompatible materials**
Oxidizing agents.**10.6. Hazardous decomposition products**
Carbon monoxide. Carbon dioxide.**11. TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects****Toxicocinetics, metabolism and distribution**
No information available.**ATEmix calculated** ATE (oral) 862,1 mg/kg; ATE (dermal) 344,8 mg/kg;
ATE (inhalative vapour) 7,14 mg/l**Acute toxicity**

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
64742-48-9	Low boiling point hydrogen treated naphtha, Naphtha (petroleum), hydrotreated heavy				
	oral	LD50	> 2000 mg/kg	Rat.	
	dermal	LD50	> 2000 mg/kg	Rabbit.	
	inhalative (4 h) vapour	LC50	> 5 mg/l	Rat.	
64742-94-5	Solvent Naphtha (mineral oil), heavy arom.				
	oral	LD50	50 mg/kg	Rat.	
	dermal	LD50	> 20 mg/kg	Rabbit.	
	inhalative (4 h) vapour	LC50	>590 mg/l	Rat.	
91-20-3	naphthalene				
	oral	LD50	490 mg/kg	Rat.	
	dermal	LD50	> 20000 mg/kg	Rabbit.	
64742-94-5	Solvent Naphtha (mineral oil), heavy arom.				
	oral	LD50	> 50 mg/kg	Rat.	
	dermal	LD50	> 20 mg/kg	Rabbit.	
	inhalative (4 h) vapour	LC50	>590 mg/l	Rat.	

Irritation and corrosivity After skin contact: In case of skin irritation, seek medical treatment.
May cause respiratory irritation. Practical experience.**Sensitising effects** May cause sensitization by skin contact.**Severe effects after repeated or prolonged exposure**
Has de-greasing effect on the skin. Frequently or prolonged contact with skin may cause dermal irritation.

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Specific effects in experiment on an animal

No information available.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Acute fish toxicity LC50: 100-1000 g/m³ (96 h) Oncorhynchus mykiss

CAS No	Chemical name	Method	Dose	h	Species	Source
64742-48-9	Low boiling point hydrogen treated naphtha, Naphtha (petroleum), hydrotreated heavy					
	Acute fish toxicity	LC50	1000 mg/l	96		
	Acute algae toxicity	ErC50	1000 mg/l			
	Acute crustacea toxicity	EC50	1000 mg/l	48		
64742-94-5	Solvent Naphtha (mineral oil), heavy arom.					
	Acute fish toxicity	LC50	2-5 mg/l	96	fish	
	Acute algae toxicity	ErC50	1-3 mg/l	72	alge	
	Acute crustacea toxicity	EC50	3-10 mg/l	48	Daphnia magna	
91-20-3	naphthalene					
	Acute fish toxicity	LC50	1,99 mg/l	96		
	Acute crustacea toxicity	EC50	3,6 mg/l	48		

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No indication of bio-accumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64742-94-5	Solvent Naphtha (mineral oil), heavy arom.	> 3
91-20-3	naphthalene	3,35
64742-94-5	Solvent Naphtha (mineral oil), heavy arom.	2,9-6,1

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

AOX: The product contains no organically bound Halogen.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Advice on disposal

Carry out a burning of hazardous waste according to official regulations.

Waste disposal number of waste from residues/unused products

140603

WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (except 07 and 08); waste organic solvents, refrigerants and foam/aerosol propellants; other solvents and solvent mixtures

Classified as hazardous waste.

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14. TRANSPORT INFORMATION**Land transport (ADR/RID)****Other applicable information (land transport)**

Not a hazardous material with respect to these transportation regulations.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

15. REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

1999/13/EC (VOC): 76,75 % (617,838 g/l)

Additional information

Sources of the most important data: 2001/118/EG, 1999/45/EG, 91/155/EWG, 67/548/EWG, (EG) 1907/2006, (EG) 1272/2008, GefStoffV, WRMG, WHG, TRG 300, TRGS 200, TRGS 220, ADR 2013, IMDG-Code

National regulatory information**Employment restrictions:** Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.**Water contaminating class (D):**

2 - water contaminating

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

16. OTHER INFORMATION**Full text of R phrases referred to under Sections 2 and 3**

22	Harmful if swallowed.
37/38	Irritating to respiratory system and skin.
40	Limited evidence of a carcinogenic effect.
50	Very toxic to aquatic organisms.
51	Toxic to aquatic organisms.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
53	May cause long-term adverse effects in the aquatic environment.
65	Harmful: may cause lung damage if swallowed.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.

Full text of H statements referred to under Sections 2 and 3

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311+H331	Toxic in contact with skin or if inhaled.
H315	Causes skin irritation.
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.

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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 singularly responsible for adhering to existing laws and regulations.
