MATERIAL SAFETY DATA SHEET

XENUM IN&OUT CLEANER

according to Regulation (EC) No 1907/2006

Date: 07/05/2014

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: XENUM IN&OUT CLEANER

Product code: 3192015

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

R phrases:
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Repeated exposure may cause skin dryness or cracking.

GHS classification

Hazard 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
2-ethylhexyl nitrate
Distillates (petroleum), hydrotreated light
Solvent Naphtha (mineral oil), heavy arom.

Signal word: Danger

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.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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 defattening 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**	**75 - < 80 %**
64742-48-9	Xn - Harmful R65-66	
	Asp. Tox. 1; H304	
248-363-6	**2-ethylhexyl nitrate**	**10 - < 15 %**
27247-96-7	Xn - Harmful, N - Dangerous for the environment R20/21/22-44-51-53-66	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Aquatic Chronic 2; H332 H312 H302 H411	
01-2119539586-27		
265-149-8	**Distillates (petroleum), hydrotreated light**	**1 - < 5 %**
64742-47-8	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	
202-436-9	**1,2,4-trimethylbenzene**	**< 1 %**
95-63-6	Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R10-20-36/37/38-51-53	
601-043-00-3	Flam. Liq. 3, Acute Tox. 4, Eye Irrit. 2, STOT SE 3, Skin Irrit. 2, Aquatic Chronic 2; H226 H332 H319 H335 H315 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	

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/m³	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
95-63-6	Trimethylbenzenes: 1,2,4-Trimethylbenzene	25 -	125 -		TWA (8 h) STEL (15 min)	WEL WEL

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 seperately from work clothing.

Eye/face protection

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

Hand protection

Tested protective gloves are to be worn: nach DIN EN 374
Suitable material:
NBR (Nitrile rubber).
Thickness of glove material:: 0,45 mm; penetration time (maximum wearing period): 480 min
NR (Natural rubber (Caoutchouc), Natural latex).
Thickness of glove material:: 0,45 mm; penetration time (maximum wearing period): 10 min
CR (polychloroprenes, Chloroprene rubber).
Thickness of glove material:: 0,75 mm; penetration time (maximum wearing period): 60 min

Addtional protection measures for the hands: Before using check leak tightness / impermeability.

Skin protection

Wear suitable protective clothing.

Respiratory protection

Respiratory protection required in case of: insufficient absorbtion. 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:	200 °C	DIN 53171
Flash point:	65 °C	DIN 51755

Flammability

Solid:	Undetermined.
Gas:	Undetermined.

Explosive properties	not Explosive.
Lower explosion limits:	0,7 vol. %
Upper explosion limits:	6 vol. %
Ignition temperature:	180 °C

Auto-ignition temperature

Solid:	Undetermined.
Gas:	Undetermined.
Decomposition temperature:	Undetermined.

Oxidizing properties	not oxidizing.	
Vapour pressure:	Undetermined.	
Density (at 20 °C):	0,810 g/cm³	DIN 51757
Water solubility:	not miscible	
Solubility in other solvents	hydrocarbons, aliphatic. hydrocarbons, aromatic.	
Partition coefficient:	Undetermined.	
Viscosity / kinematic:	Undetermined.	
Flow time (at 20 °C):	< 30 s	3 DIN EN ISO 2431
Vapour density:	Undetermined.	
Evaporation rate (at 20 °C):	Undetermined.	
Solvent content:	75%	

9.2. Other information

Solid content:	0,25%

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) 1088,1 mg/kg; ATE (dermal) 579,6 mg/kg;
ATE (inhalative vapour) 6,07 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.	
27247-96-7	**2-ethylhexyl nitrate**				
	oral	ATE	500 mg/kg		
	dermal	ATE	1100 mg/kg		
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		
64742-47-8	**Distillates (petroleum), hydrotreated light**				
	oral	LD50	5000 mg/kg		
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.	
95-63-6	**1,2,4-trimethylbenzene**				
	oral	LD50	5000 mg/kg	Rat	RTECS
	inhalative (4 h) vapour	LC50	18 mg/l	Rat	RTECS
	inhalative aerosol	ATE	1,5 mg/l		
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.

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					
	Aquatic toxicity	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		

64742-47-8	**Distillates (petroleum), hydrotreated light**					
	Acute fish toxicity	LC50	2,6 mg/l	96		
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	
95-63-6	**1,2,4-trimethylbenzene**					
	Acute fish toxicity	LC50	7,72 mg/l	96	Pimephales promelas	
	Acute crustacea toxicity	EC50	3,6 mg/l	48	Daphnia	ECOTOX Database
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

Product is not easily biodegradable.

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
95-63-6	1,2,4-trimethylbenzene	3,63
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 harzardous 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.

14. TRANSPORT INFORMATION

Land transport (ADR/RID)

Other applicable information (land transport)

Not a hazardous material with respect to these transportation regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

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): 84,385 % (683,519 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

10	Flammable.
20	Harmful by inhalation.
20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
22	Harmful if swallowed.
36/37/38	Irritating to eyes, respiratory system and skin.
37/38	Irritating to respiratory system and skin.
40	Limited evidence of a carcinogenic effect.
44	Risk of explosion if heated under confinement.
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

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311+H331	Toxic in contact with skin or if inhaled.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
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.

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.