Safety data sheet
According to 1907/2006 EEC Article 31

Printing date: 16.07.2015 Version: 2 Revision: 16.07.2015

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

· **1.1 Product identifier**

· **Trade name: Xenum Super 5.1**

· **Article number:** 4038500
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
· **Sector of Use**
SU21 Consumer uses: Private households / general public / consumers
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
· **Product category** PC24 Lubricants, greases, release products
· **Process category**
PROC11 Non industrial spraying
PROC7 Industrial spraying
· **Application of the substance / the mixture** Screw loosing agent

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
XENUM N.V.
Steenkaaistraat 17
B-9200 Dendermonde, Belgium
Tel.: +32 52 22 38 08
Fax: +32 52 22 51 60
E-mail: info@xenum.eu

· **Further information obtainable from:** Research & Development/E-mail: info@xenum.eu
· **1.4 Emergency telephone number:** During normal opening hours: Tel: +32 479 82 08 08

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SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

GHS02 flame

Flam. Aerosol 1	H222-H229	Extremely flammable aerosol. Pressurised container: May burst if heated.

GHS08 health hazard

STOT RE 1	H372	Causes damage to organs through prolonged or repeated exposure.

GHS07

STOT SE 3	H336	May cause drowsiness or dizziness.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**

GHS02 GHS07 GHS08

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· **Signal word** Danger

· **Hazard-determining components of labelling:**
Hydrocarbon, C9-C12, n-alkanes,iso-alkenes, cyclic, aromates(2-25%)
Distillates (petroleum), hydrotreated light
· **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H336 May cause drowsiness or dizziness.
H372 Causes damage to organs through prolonged or repeated exposure.
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.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 Do not pierce or burn, even after use.
P260 Do not breathe spray.
P211 Do not spray on an open flame or other ignition source.
P280 Wear protective gloves / eye protection.
P273 Avoid release to the environment.
P271 Use only outdoors or in a well-ventilated area.
P301+P310 IF SWALLOWED: Immediately call a doctor.
P331 Do NOT induce vomiting.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P403 Store in a well-ventilated place.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Additional information:**
EUH066 Repeated exposure may cause skin dryness or cracking.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Active substance with propellant

· **Dangerous components:**		
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	butane (containing < 0.1% butadiene (203-450-8)) Flam. Gas 1, H220; Press. Gas C, H280	10-<25%
CAS: 64742-82-1 EC number: 919-446-0 Reg.nr.: 01-2119458049-33	Hydrocarbon, C9-C12, n-alkanes,iso-alkenes, cyclic, aromates(2-25%) Flam. Liq. 3, H226; STOT RE 1, H372; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336	10-<25%
CAS: 64742-47-8 EC number: 926-141-6 Reg.nr.: 01-2119456620-43	Distillates (petroleum), hydrotreated light Asp. Tox. 1, H304	10-<25%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	propane Flam. Gas 1, H220; Press. Gas C, H280	10-<25%

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· **Ingredients according to detergents guidline 648/2004/EC**	
aliphatic hydrocarbons	≥ 30%

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· **Additional information:**

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:** Generally the product does not irritate the skin.
· **After eye contact:** Rinse opened eye for several minutes under running water.
· **After swallowing:** Do not induce vomiting; call for medical help immediately.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
Water haze
Fire-extinguishing powder
Carbon dioxide
Alcohol resistant foam
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:** Mount respiratory protective device.

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SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
· **Information about fire - and explosion protection:**
Do not spray onto a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.

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· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurised containers.
· **Information about storage in one common storage facility:**
Observe official regulations on storing packagings with pressurised containers.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Do not seal receptacle gas tight.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
106-97-8 butane (containing < 0.1% butadiene (203-450-8))	
WEL	Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
74-98-6 propane	
OEL	Short-term value: 3600 mg/m³, 2000 ppm Long-term value: 1800 mg/m³, 1000 ppm

· **DNELs**		
64742-82-1 Hydrocarbon, C9-C12, n-alkanes,iso-alkenes, cyclic, aromates(2-25%)		
Oral	DNEL Long term-systemic	26 mg/kg bw/day (Consumer)
Dermal	DNEL Long term-systemic	26 mg/kg bw/day (Consumer)
		44 mg/kg bw/day (Worker)
Inhalative	DNEL Long term-systemic	71 mg/m3 (Consumer)
		330 mg/m3 (Worker)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Filter AX/P2
Use suitable respiratory protective device in case of insufficient ventilation.
Filter A/P2
· **Protection of hands:**

Protective gloves

Solvent resistant gloves

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Wear gloves for the protection against chemicals according to EN 374
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.5 mm

· **Penetration time of glove material**
For continuous contact we recommend gloves with breakthrough time of at least 240 minutes, with the preference given to a breakthrough time greater than 480 minutes. For short-term or splash guard we recommend the same. We are aware that suitable gloves that offer this level of protection may not be available. In that case, a shorter breakthrough time are acceptable as long as the procedures governing maintenance and timely replacement are followed. The thickness of the gloves is not a good measure of the resistance of the gloves against a chemical substance, because this depends on the exact composition of the material from which the gloves are made.
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**
Safety glasses


Tightly sealed goggles

· **Body protection:** Use protective suit.

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SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Aerosol
Colour:	Colourless
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	-44 °C
· **Flash point:**	-97 °C
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	> 200 °C
· **Decomposition temperature:**	Not determined.
· **Self-igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.
· **Explosion limits:**	
Lower:	0.5 Vol %
Upper:	10.9 Vol %
· **Vapour pressure at 20 °C:**	8300 hPa

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· **Density at 20 °C:**	0.689 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with water:**	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	70.0 %
Solids content:	0.5 %
· **9.2 Other information**	No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity**

· **LD/LC50 values relevant for classification:**		
64742-82-1 Hydrocarbon, C9-C12, n-alkanes,iso-alkenes, cyclic, aromates(2-25%)		
Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	> 3160 mg/kg (rabbit)
64742-47-8 Distillates (petroleum), hydrotreated light		
Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50(8h)	>5000 mg/m3 (rat)
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics		
Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50/4h	>4951 mg/l (rat)

· **Primary irritant effect:**
· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.

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· **STOT-single exposure**
May cause drowsiness or dizziness.
· **STOT-repeated exposure**
Causes damage to organs through prolonged or repeated exposure.
· **Aspiration hazard**
May be fatal if swallowed and enters airways.

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SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
64742-82-1 Hydrocarbon, C9-C12, n-alkanes,iso-alkenes, cyclic, aromates(2-25%)	
EL50 (72h)	4.6-10 mg/l (Pseudokirchneriella subcapitata)
EL50(48h)	10-22 mg/l (Daphnia magna)
LL50 (96h)	10-30 mg/l (Oncorhynchus mykiss (96h))
LOEC (21 days)	0.203 mg/l (Daphnia magna)
NOEC (21 days)	0.097 mg/l (Daphnia magna)
NOELR (72h)	1 mg/l (Pseudokirchneriella subcapitata)
64742-47-8 Distillates (petroleum), hydrotreated light	
EL0 (48h)	1000 mg/l (Daphnia magna)
EL0(72h)	1000 mg/l (Pseudokirchneriella subcapitata)
LL0(96h)	1000 mg/l (Oncorhynchus mykiss (96h))
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics	
EL0 (48h)	1000 mg/l (Daphnia magna)
EL0(72h)	1000 mg/l (Pseudokirchneriella subcapitata)
LL0(96h)	1000 mg/l (Oncorhynchus mykiss)
NOELR (72h)	1000 mg/l (Pseudokirchneriella subcapitata)

· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Harmful to fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information

· **14.1 UN-Number**
· **ADR, ADN, IMDG, IATA** UN1950

· **14.2 UN proper shipping name**
· **ADR, ADN** UN1950 AEROSOLS
· **IMDG** AEROSOLS
· **IATA** AEROSOLS, flammable

· **14.3 Transport hazard class(es)**

· **ADR**

· **Class** 2 5F Gases.
· **Label** 2.1

· **ADN**
· **ADN/R Class:** 2 5F

· **IMDG, IATA**

· **Class** 2.1
· **Label** 2.1

· **14.4 Packing group**
· **ADR, IMDG, IATA** Void

· **14.5 Environmental hazards:**
· **Marine pollutant:** No

· **14.6 Special precautions for user** Warning: Gases.
· **Danger code (Kemler):** -
· **EMS Number:** F-D,S-U

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **ADR**
· **Limited quantities (LQ)** 1L
· **Excepted quantities (EQ)** Code: E0
Not permitted as Excepted Quantity
· **Transport category** 2
· **Tunnel restriction code** D

· **IMDG**
· **Limited quantities (LQ)** 1L
· **Excepted quantities (EQ)** Code: E0
Not permitted as Excepted Quantity

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· **UN "Model Regulation":** UN1950, AEROSOLS, 2.1

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SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **Seveso category** P3a FLAMMABLE AEROSOLS
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
NK	50-<75

· **VOC-CH** 69.99 %
· **VOC-EU** 482.2 g/l
· **Danish MAL Code** 5-3
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H220 Extremely flammable gas.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.
H372 Causes damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

· **Department issuing MSDS:** Research & Development
· **Contact:** Peter Tossyn
· **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 Harmonised 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 (division of the American Chemical Society)
MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)
DNEL: Derived No-Effect Level (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Gas 1: Flammable gases, Hazard Category 1
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
Press. Gas C: Gases under pressure: Compressed gas
Flam. Liq. 3: Flammable liquids, Hazard Category 3
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1
Asp. Tox. 1: Aspiration hazard, Hazard Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3
· *** Data compared to the previous version altered. ***