

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 20.04.2011

Version: 5

Revision: 20.04.2011

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

- **Product identifier**
- **Trade name:** LNO 'DrentRclpvJ gcvTgukwcpVO cw
- **Article number:** J04610
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Spray varnish
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
GMS Lubricants B.V.
Walruskoog 3-5
NL-1822 BC Alkmaar
The Netherlands
Tel: +31 (0)72 - 5616464
E-mail: ihumphreys@gms.nl
- **Further information obtainable from:** Research & Development / E-mail: ihumphreys@gms.nl
- **Emergency telephone number:** During normal opening hours: Tel: +31 (0)72 - 5616464

2 Hazards identification

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



GHS02 flame

Flam. Aerosol 1 H222 Extremely flammable aerosol.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Irritant

R36: Irritating to eyes.



F+; Extremely flammable

R12: Extremely flammable.

R52/53-66-67: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Warning! Pressurized container.

Has a narcotizing effect.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

(Contd. on page 2)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 20.04.2011

Version: 5

Revision: 20.04.2011

Trade name: LNO 'D'æniRclpv'J gcv'Tgukwcpv'O cw

(Contd. of page 1)

· **Code letter and hazard designation of product:**

Xi Irritant
F+ Extremely flammable

· **Risk phrases:**

- 12 Extremely flammable.
- 36 Irritating to eyes.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

· **Safety phrases:**

- 2 Keep out of the reach of children.
- 16 Keep away from sources of ignition - No smoking.
- 23 Do not breathe fumes/aerosol.
- 25 Avoid contact with eyes.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.

· **Special labelling of certain preparations:**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Buildup of explosive mixtures possible without sufficient ventilation.

· **Classification in accordance with Directive 75/324/EEC:** Extremely flammable· **Other hazards**· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Active substance with propellant

· **Dangerous components:**

CAS: 67-64-1 EINECS: 200-662-2	Acetone Xi R36; F R11 R66-67 Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	25-<50%
CAS: 106-97-8 EINECS: 203-448-7	butane (containing < 0.1% butadiene (203-450-8)) F+ R12 Flam. Gas 1, H220; Press. Gas, H280	10-<25%
CAS: 108-10-1 EINECS: 203-550-1	4-methylpentan-2-one Xn R20; Xi R36/37; F R11 R66 Flam. Liq. 2, H225; Acute Tox. 4, H332; Eye Irrit. 2, H319; STOT SE 3, H335	10-<25%
CAS: 74-98-6 EINECS: 200-827-9	propane F+ R12 Flam. Gas 1, H220; Press. Gas, H280	10-<25%

(Contd. on page 3)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 20.04.2011

Version: 5

Revision: 20.04.2011

Trade name: LNO 'DraeniRclpv'J gcv'Tgukwcpv'O cw

		(Contd. of page 2)
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. Benzene<0.1% Xn R65; Xi R37; N R51/53 R10-66-67 Asp. Tox. 1, H304	2.5-<10%
CAS: 1330-20-7 EINECS: 215-535-7	xylene (mix) Xn R20/21; Xi R38 R10 Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	1.0-<2.5%
CAS: 95-63-6 EINECS: 202-436-9	1,2,4-trimethylbenzene Xn R20; Xi R36/37/38; N R51/53 R10 Flam. Liq. 3, H226; Aquatic Chronic 2, H411; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	1.0-<2.5%
CAS: 108-67-8 EINECS: 203-604-4	mesitylene Xi R37; N R51/53 R10 Flam. Liq. 3, H226; Aquatic Chronic 2, H411; STOT SE 3, H335	0.1-<1.0%
CAS: 98-82-8 EINECS: 202-704-5	isopropylbenzene Xn R65; Xi R37; N R51/53 R10 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335	0.1-<1.0%

4 First aid measures

- **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. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **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
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.

(Contd. on page 4)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 20.04.2011

Version: 5

Revision: 20.04.2011

Trade name: LNO 'DreiniRclpv'J gcv'Tgukwcpv'O cw

(Contd. of page 3)

- **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.
- **Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **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.

7 Handling and storage

- **Handling:**
- **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.
 - Pressurized 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.
- **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 pressurized containers.
- **Information about storage in one common storage facility:**
 - Observe official regulations on storing packagings with pressurized 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.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

Ingredients with limit values that require monitoring at the workplace:

67-64-1 Acetone

WEL	Short-term value: 3620 mg/m ³ , 1500 ppm
	Long-term value: 1210 mg/m ³ , 500 ppm

106-97-8 butane (containing < 0.1% butadiene (203-450-8))

WEL	Short-term value: 1810 mg/m ³ , 750 ppm
	Long-term value: 1450 mg/m ³ , 600 ppm
	Carc (if more than 0.1% of buta-1.3-diene)

108-10-1 4-methylpentan-2-one

WEL	Short-term value: 416 mg/m ³ , 100 ppm
	Long-term value: 208 mg/m ³ , 50 ppm
	Sk

(Contd. on page 5)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 20.04.2011

Version: 5

Revision: 20.04.2011

Trade name: LNO 'Dixen' Rclpv'J gcv'T gukwcpv'O cw

(Contd. of page 4)

74-98-6 propane

WEL Short-term value: 3600 mg/m³, 2000 ppm
Long-term value: 1800 mg/m³, 1000 ppm

1330-20-7 xylene (mix)

WEL Short-term value: 441 mg/m³, 100 ppm
Long-term value: 220 mg/m³, 50 ppm
Sk; BMGV

95-63-6 1,2,4-trimethylbenzene

WEL Long-term value: 125 mg/m³, 25 ppm
ILV

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

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

· **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.
Use suitable respiratory protective device in case of insufficient ventilation.
Filter AX/P2

· **Protection of hands:**



Protective gloves

Solvent resistant gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves** Nitrile rubber, NBR

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

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

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:

Aerosol

Colour:

According to product specification

· **Odour:**

Characteristic

· **Odour threshold:**

Not determined.

(Contd. on page 6)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 20.04.2011

Version: 5

Revision: 20.04.2011

Trade name: LNO 'DræniRclpv'J gcv'Tgukwcpv'O cw

(Contd. of page 5)

· 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:	365°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:	1.5 Vol %
Upper:	13.0 Vol %
· Vapour pressure at 20°C:	4 Bar
· Density at 20°C:	0.767 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Segregation coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	82.1 %
Solids content:	17.9 %
· Other information	No further relevant information available.

10 Stability and reactivity

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

GB

(Contd. on page 7)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 20.04.2011

Version: 5

Revision: 20.04.2011

Trade name: LNO 'Dixen' Rclpv'J gcv'T gukwcpv'O cw

(Contd. of page 6)

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

67-64-1 Acetone

Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rbt)
Inhalative	LC50/4h	39 mg/l (rat)

108-10-1 4-methylpentan-2-one

Oral	LD50	2100 mg/kg (rat)
Dermal	LD50	16000 mg/kg (rabbit)
Inhalative	LC50/4 h	8.3-16.6 mg/l (rat)

64742-95-6 Solvent naphtha (petroleum), light arom. Benzene<0.1%

Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rabbit)
Inhalative	LC50/4 h	>10.2 mg/l (rat)

1330-20-7 xylene (mix)

Oral	LD50	8700 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rbt)
Inhalative	LC50/4 h	6350 mg/l (rat)

95-63-6 1,2,4-trimethylbenzene

Oral	LD50	>3500 mg/kg (rat)
Dermal	LD50	3160 mg/kg (rabbit)
Inhalative	LC50	18 mg/L (rat)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

67-64-1 Acetone

EC50/48h	39 mg/l (Daphnia magna)
LC50/96h	>5000 mg/l (Fish)

1330-20-7 xylene (mix)

EC50	7.4 mg/l (Daphnia Magna 48h)
LC50	3.77 - 13.5 mg/l (Fish (96h))

95-63-6 1,2,4-trimethylbenzene

EC50	3.6 mg/l (Daphnia Magna 48h)
LC50	7.72 mg/l (Pimephales promelas (96 h))

- **Persistence and degradability** No further relevant information available.

(Contd. on page 8)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 20.04.2011

Version: 5

Revision: 20.04.2011

Trade name: LNO 'DreiniRclpv'J gcv'Tgukwcpv'O cw

(Contd. of page 7)

- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

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

· European waste catalogue

08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
15 01 04	metallic packaging
15 01 02	plastic packaging

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

14 Transport information

· Land transport ADR/RID (cross-border)



- **ADR/RID class:** 2 5F Gases.
- **Danger code (Kemler):** -
- **UN-Number:** 1950
- **Packaging group:** -
- **Hazard label** 2.1
- **UN proper shipping name:** 1950 AEROSOLS
- **Limited quantities (LQ)** 1L
- **Transport category** 2
- **Tunnel restriction code** D

· Maritime transport IMDG:



- **IMDG Class:** 2.1
- **UN Number:** 1950
- **Label** 2.1

(Contd. on page 9)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 20.04.2011

Version: 5

Revision: 20.04.2011

Trade name: LNO 'DræniRklpv'J gcv'Tgukwcpv'O cw

(Contd. of page 8)

- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** No
- **Proper shipping name:** AEROSOLS

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 2.1
- **UN/ID Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **Proper shipping name:** AEROSOLS, flammable

- **UN "Model Regulation":** UN1950, AEROSOLS, 2.1
- **Special precautions for user:** Warning: Gases.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.

15 Regulatory information

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

- **National regulations:**

- **Technical instructions (air):**

Class	Share in %
NK	50-100

- **VOC-CH:** 82.15 %
- **VOC-EU:** 630.1 g/l
- **Danish MAL Code:** 3-1
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
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.
H411	Toxic to aquatic life with long lasting effects.
R10	Flammable.
R11	Highly flammable.
R12	Extremely flammable.
R20	Harmful by inhalation.
R20/21	Harmful by inhalation and in contact with skin.

(Contd. on page 10)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 20.04.2011

Version: 5

Revision: 20.04.2011

Trade name: LNO 'DæniRclpv'J gcv'Tgukwcpv'O cw

(Contd. of page 9)

- R36 Irritating to eyes.
- R36/37 Irritating to eyes and respiratory system.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R37 Irritating to respiratory system.
- R38 Irritating to skin.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R65 Harmful: may cause lung damage if swallowed.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Research & Development

· **Contact:** Ian Humphreys

· **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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

GB