SAFETY DATA SHEET

Marine Gassolje 500 ppm

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	11.12.2017
Revision date	07.12.2018

1.1. Product identifier

Product name	Marine Gassolje 500 ppm
Synonyms	GO 500ppm Base, GO 500ppm Farget Base
Article no.	400001172, 400000933, 400000934

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product group	Fuel
Use of the substance / preparation	Fuel for diesel-powered boat engines, boiler, gas turbines and other combustion equipment.

1.3. Details of the supplier of the safety data sheet

Distributor

Company name	St1 Norge AS
Postal address	Postboks 1154 Sentrum
Postcode	0107
City	OSLO
Country	Norge
Telephone number	+47 22665000
Email	sds@st1.no

Registrant

Company name	North European Oil Trade Oy
Office address	Urho Kekkosen katu 5C, 00100 Helsinki
Postal address	P.O. Box 55
Postcode	00088 S-RYHMÄ

City	Helsinki
Country	Finland
Telephone number	+358 10 402 7001
Email	tuotelaatu@neot.fi
Website	http://www.neot.fi/en
Enterprise No.	FI18010565

1.4. Emergency telephone number

Emergency telephone	Telephone number: +47 22 59 13 00 Description: Norwegian Poison Information Center

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Flam. Liq. 3; H226 Asp. tox. 1; H304 Acute tox. 4; H332 Skin Irrit. 2; H315 Carc. 2; H351 STOT RE 2; H373 Aquatic Chronic 2; H411
Substance / mixture hazardous properties	Flammable liquid and vapour. May be fatal if swallowed and enters airways. Suspected of causing cancer. Harmful by inhalation. Irritating to skin. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictograms (CLP)

Composition on the label	Fuels, diesel ≤ 100 %
Signal word	Danger
Hazard statements	H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H332 Harmful if inhaled. H351 Suspected of causing cancer H373 May cause damage to organs through prolonged or repeated exposure H411 Toxic to aquatic life with long lasting effects.

Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing dust / fume / gas / mist / vapours / spray. P280 Wear protective gloves / protective clothing / eye protection / face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician. P501 Dispose of contents / container to to an approved waste disposal plant.

2.3. Other hazards

PBT / vPvB	The mixture does not meet current criteria for PBT (Persistent, bioaccumulative and toxic) or vPvB (very persistent and very bioaccumulative).
Physicochemical effects	This material is a static accumulator. The vapours are heavier than air and will spread along the floor. Can form explosive gas-air mixtures.
Health effect	Contains a small amount of a substance suspected of causing cancer. Parts of the chemical might be absorbed through the skin. If, by vomitting, the chemical reaches the lungs, life-threatening chemical pneumonia may develop.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
Fuels, diesel	CAS No.: 68334-30-5 EC No.: 269-822-7 REACH Reg. No.: 01-2119484664-27	Flam. Liq. 3; H226 Asp. tox. 1; H304 Acute tox. 4; H332 Skin Irrit. 2; H315 Carc. 2; H351 STOT RE 2; H373 Aquatic Chronic 2; H411	≤ 100 %

Description of the mixture	Complex mixture of hydrocarbons consisting of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons with carbon numbers predominantly in the C9 to C25 range (including napthalene (CAS 91-20-3, EC 202-049-5) and cumene (CAS 98-82-8, EC 202-704-5) in concentrations ≤0,5 vol.%). May contain catalytically cracked oils in which polycyclic aromatic compounds, mainly 3-ring but some 4- to 6-ring species are present. May also contain several additives at <0.1 vol.% each.
Substance comments	See section 16 for explanation of hazard statements (H) listed above.

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Emergency telephone number: see section 1.4. In case of unconsciousness or severe accidents, call 112.
Inhalation	Provide rest, warmth and fresh air. Get medical attention if any discomfort continues. In case of unconsciousness, loosen tight-fitting clothing. If respiratory problems, provide artificial respiration or oxygen. Seek medical advice.
Skin contact	Remove contaminated clothing. Wash the skin immediately with soap and water.

	Contact physician if irritation persists.
Eye contact	Promptly rinse eyes with plenty of water (tempered at 20-30°C) for at least 15 minutes. Remove contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not give anything to drink. Get medical attention immediately!

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

Acute symptoms and effects	Ingestion: Symptoms such as coughing, breathing difficulties, vomiting or lethargy may indicate chemical pneumonitis. Inhalation: Harmful by inhalation. Skin contact: The chemical irritates the skin and can cause itching, burning and redness. Parts of the chemical might be absorbed through the skin. Eye contact: May cause eye irritation. Symptoms may be stinging pain and redness in the eyes.
Delayed symptoms and effects	Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Symptoms of chemical pneumonia may occur within 24 hours of difficulty breathing and coughing.

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

Other information	Treat symptomatically. No specific information from the manufacturer.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	In case of major fire and large quantities: Foam. Water spray, fog or mist. Small fires: Dry chemical powder, carbondioxide (CO_2), sand or earth.
Improper extinguishing media	Do not use water jet. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Flammable liquid and vapour. Closed containers can burst violently when heated, due to excess pressure build-up. Can form explosive gas-air mixtures. Vapours are heavier than air and may spread near ground to sources of ignition. This material is a static accumulator.
Hazardous combustion products	May include, but is not limited to: Carbon dioxide (CO_2). Carbon monoxide (CO). Oxides of sulphur (SO_x). Unspecified organic compounds.

5.3. Advice for firefighters

Personal protective equipment	Use compressed air equipment when the chemical is involved in fire. See also section 8.

Other information	If there is no risk involved, move the containers to a safe place. If not possible, cool with water from a safe position. Extinguishing water must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Keep away from sources of ignition - No smoking.
Personal protection measures	Use protective equipment as referred to in section 8. Provide adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes.

6.2. Environmental precautions

Environmental precautionary measures	Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Clean up	Stop leak if possible without any risk. Collect with absorbent, non-combustible material into suitable containers. Proposals for inert materials: sand, kieselguhr, universal binder. Collect in a suitable container and dispose as hazardous waste according to section 13. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water.

6.4. Reference to other sections

Other instructions	See also sections 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Use protective equipment as referred to in section 8. Provide adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Avoid swallowing. Product transfer: Wait 2 minutes after tank filling (for tanks such as those on road tanker vehicles) before opening hatches or manholes. Wait 30 minutes after tank filling (for large storage tanks) before opening hatches or manholes. Keep containers closed when not in use. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. Be aware of handling operations that may give rise to additional hazards that result from the accumulation of static charges. These include but are not limited to pumping (especially turbulent flow), mixing, filtering, splash filling, cleaning and filling of tanks and containers, sampling, switch loading, gauging, vacuum truck operations, and mechanical movements. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/s until fill pipe submerged to twice its diameter, then ≤ 7 m/s).

Protective safety measures

Safety measures to prevent fire	Do not use near naked flames or glowing materials. Keep away from sources of ignition - No smoking. Do not spray on a naked flame or red-hot material. Take precautionary measures against static discharges. Use explosion-proof electrical / ventilating / lighting / / equipment. Use only non-sparking tools. Ground / bond container and receiving equipment.
Additional information	Can form explosive gas-air mixtures. The vapours are heavier than air and will spread along the floor.
Advice on general occupational hygiene	Do not eat, drink or smoke during work. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash contaminated clothing before reuse. Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Drum and small container storage: Use approved containers. Store in tightly closed container in a well-ventilated place. Store in tightly closed container in a well-ventilated place. Tank storage: Tanks must be specifically designed for use with this product. Bulk storage tanks should be diked (bunded). Store protected against heat and direct sunlight. Follow rules for flammable liquids.

Conditions for safe storage

Advice on storage compatability	Keep away from: Strong oxidizing agents. Food and feed.

7.3. Specific end use(s)

Specific use(s)	See section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Value	TWA Year
Decanes and higher aliphatic hydrocarbons		TWA (8h) : 40 ppm TWA (8h) : 275 mg/m³	
Oil vapour		TWA (8h) : 50 mg/m³	
Oil mist (mineral particles)		TWA (8h) : 1 mg/m³	
Naphthalene	CAS No.: 91-20-3	TWA (8h) : 10 ppm TWA (8h) : 50 mg/m³ **Exposure limit letter** Letter code: E	
Cumene	CAS No.: 98-82-8	TWA (8h) : 20 ppm TWA (8h) : 100 mg/m³ **OEL short term value** Value: 50 ppm **OEL short term value** Value: 250 mg/m³	

	Exposure limit letter Letter code: H, K, E, S
Other Information about threshold limit values	Explanation of the notations: E = The substance has an EU workplace exposure limit. H = Can be absorbed through the skin. K = Carcinogen S = Short term value is a threshold limit which shall not be exceeded when the exposure is averaged over a stated reference period. The reference period is 15 minutes unless otherwise specified. References (laws/regulations): Norwegian regulation on exposure limits: FOR 2011-12-06 nr 1358 Forskrift om tiltaks- og grenseverdier (sist endret gjennom FOR-2018-08-21-1255).

8.2. Exposure controls

Precautionary measures to prevent exposure

Technical measures to prevent exposure	Provide adequate ventilation. The personal protective equipment must be CE-marked and the latest version of the standards shall be used. The protective equipment and the specified standards recommended below are only suggestions, and should be selected on advice from the supplier of such equipment. A risk assessment of the work place/work activities (the actual risk) may lead to other control measures. The protection equipments suitability and durability will depend on application.

Eye / face protection

Eye protection equipment	Description: Wear approved chemical safety goggles where eye exposure is reasonably probable. Reference to relevant standard: BS-EN 166 (Personal eye-protection. Specifications).
Additional eye protection measures	Eye wash facilities should be at the work place. Either a fixed eye wash facility connected to the drinking water (preferably warm water) or a portable disposable unit.

Hand protection

Suitable materials	Nitrile. For incidental contact/splash protection, Neoprene, PVC gloves may be suitable.
Breakthrough time	Value: > 240 minute(s)
Thickness of glove material	Comments: No specific information from the manufacturer.
Hand protection equipment	Description: Use chemical resistant gloves. The gloves abilities may vary among the different glove manufacturers. Reference to relevant standard: BS-EN 374 (Protective gloves against chemicals and micro-organisms). BS-EN 420 (Protective gloves. General requirements and test methods).
Additional hand protection measures	If signs of wear and tear are noticed then the gloves should be replaced.

Skin protection

Recommended protective clothing	Description: Use appropriate antistatic protective clothing.

Additional skin protection measures	Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Wash contaminated clothing before reuse. Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse. Emergency shower should be available at the workplace.

Respiratory protection

Recommended respiratory protection	Description: In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A/P3). At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used. Reference to relevant standard: BS-EN 12083 (Respiratory protective devices. Filters with breathing hoses, (Non-mask mounted filters). Particle filters, gas filters, and combined filters. Requirements, testing, marking). BS-EN 14387 (Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking). BS-EN 136 (Respiratory protective devices. Full face masks. Requirements, testing, marking) BS-EN 140 (Respiratory protective devices. Half masks and quarter masks. Requirements, testing, marking)

Appropriate environmental exposure control

Environmental exposure controls	Do not allow to enter into sewer, water system or soil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Colourless.
Odour	Not specified by the manufacturer.
Odour limit	Comments: Not specified by the manufacturer.
pH	Comments: Not specified by the manufacturer.
Melting point / melting range	Comments: Not specified by the manufacturer.
Boiling point / boiling range	Value: 170 - 390 °C
Flash point	Value: 60 - 75 °C
Evaporation rate	Comments: Not specified by the manufacturer.
Flammability (solid, gas)	Not relevant.
Explosion limit	Value: 1 - 6 vol%
Vapour pressure	Value: ≤ 0,4 kPa Temperature: 38,0 °C Value: ≤ 0,6 kPa Temperature: 50,0 °C
Vapour density	Comments: Not specified by the manufacturer.

Specific gravity	Comments: See density.
Density	Value: > 820 ≤ 860 kg/m³ Temperature: 15 °C
Solubility	Medium: Water Comments: Negligible.
Partition coefficient: n-octanol/ water	Value: ≥ 4
Spontaneous combustability	Value: > 225 °C
Decomposition temperature	Comments: Not specified by the manufacturer.
Viscosity	Value: 2 - 4,5 mm2/s Temperature: 40 °C Type: Kinematic
Explosive properties	The chemical is not explosive, but may form explosive mixtures with air.
Oxidising properties	Not specified by the manufacturer.

9.2. Other information

Physical hazards

Conductivity	Comments: < 100 pS/m

Other physical and chemical properties

Comments	No further information is available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Under normal conditions and use there are not expected any reactivity hazards for this chemical.

10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Arise in contact with incompatible materials (see section 10.5) and/or under inappropriate conditions (see section 10.4).

10.4. Conditions to avoid

Conditions to avoid	Heat, sparks or open flame. Take precautionary measures against static discharge.

10.5. Incompatible materials

Materials to avoid	Strong oxidising substances.

10.6. Hazardous decomposition products

Hazardous decomposition products	None under normal conditions. See also section 5.2.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Type of toxicity: Acute Effect tested: LC50 Route of exposure: Inhalation. (dust / mist) Duration: 4 hour(s) Value: > 3,6 ≤ 5,4 mg/l Species: Rat Comments: Applies to CAS 68334-30-5. Source: REACH dossier information.
Other toxicological data	Additional test data is available from the supplier/manufacturer.

Other information regarding health hazards

Assessment of acute toxicity, classification	Harmful by inhalation.
Assessment of skin corrosion / irritation, classification	Irritating to skin.
Assessment of eye damage or irritation, classification	Based on available data, the classification criteria are not met.
Assessment of respiratory sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of skin sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of germ cell mutagenicity, classification	Based on available data, the classification criteria are not met.
Assessment of carcinogenicity, classification	Suspected of causing cancer. Repeated skin contact has resulted in irritation and skin cancer in animals.
Assessment of reproductive toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ SE, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity RE, classification	May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure. Classification: STOT RE 2: H373.
Assessment of aspiration hazard, classification	May be fatal if swallowed and enters airways.

Symptoms of exposure

In case of ingestion	Symptoms such as coughing, breathing difficulties, vomiting or lethargy may indicate chemical pneumonitis.
In case of skin contact	The chemical irritates the skin and can cause itching, burning and redness. Parts of the chemical might be absorbed through the skin.
In case of inhalation	Harmful by inhalation.

In case of eye contact	May cause eye irritation. Symptoms may be stinging pain and redness in the eyes.
Other information	Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic, fish	Value: 28 mg/l Effect dose concentration : LL50 Test duration: 48 hour(s) Species: Oncorhynchus mykiss Comments: Applies to CAS 68334-30-5. Source: REACH dossier information.
Acute aquatic, Daphnia	Value: 210 mg/l Effect dose concentration : EL50 Test duration: 48 hour(s) Species: Daphnia magna Comments: Applies to CAS 68334-30-5. Source: REACH dossier information.
Ecotoxicity	Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Persistence and degradability, comments	Expected to be readily biodegradable. Volatile solvents are rapidly oxidized by photochemical reaction in air.

12.3. Bioaccumulative potential

Bioaccumulative potential	Contains components which have bioaccumulative potential. Log Pow: ≥ 4.

12.4. Mobility in soil

Mobility	Floats on water. Evaporates within one day from water or soil surfaces. May contaminate soil and groundwater.

12.5. Results of PBT and vPvB assessment

PBT assessment results	The mixture does not meet current criteria for PBT (Persistent, bioaccumulative and toxic).
vPvB evaluation results	The mixture does not meet current criteria for vPvB (very persistent and very bioaccumulative).

12.6. Other adverse effects

Other adverse effects, comments	Avoid release to the environment. Forms an oil film on water surfaces that may harm organisms in the water and disrupt oxygen transport in the boundary layer between air and water.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Disposed of as hazardous waste by approved contractor. The waste code (EWC-Code) is intended as a guide. The code must be chosen by the user, if the use differs from the one mentioned below.
EWC waste code	EWC waste code: 130701 fuel oil and diesel Classified as hazardous waste: Yes
NORSAS	7023 Waste fuels and fuel oils.
Other information	Do not empty into drains.

SECTION 14: Transport information

Dangerous goods	Yes

14.1. UN number

ADR / RID / ADN	1202
IMDG	1202
ICAO / IATA	1202

14.2. UN proper shipping name

Proper shipping name english ADR / RID / ADN	DIESEL FUEL
ADR / RID / ADN	DIESEL FUEL
IMDG	DIESEL FUEL
ICAO / IATA	DIESEL FUEL

14.3. Transport hazard class(es)

ADR / RID / ADN	3
Classificaton code ADR / RID / ADN	F1
IMDG	3
ICAO / IATA	3

14.4. Packing group

ADR / RID / ADN	III
IMDG	III
ICAO / IATA	III

14.5. Environmental hazards

IMDG Marine pollutant	Yes

14.6. Special precautions for user

Special safety precautions for user	Not entered.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Product name	DIESEL FUEL

Additional information

ADR / RID / ADN hazard label	3
IMDG Hazard label	3
ICAO / IATA Hazard label	3

ADR / RID - Other information

Tunnel restriction code	D/E
Transport category	3
Hazard No.	30
RID other applicable information	30

IMDG / ICAO / IATA Other information

EmS	F-E, S-E

SECTION 15: Regulatory information

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

References (laws/regulations)	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP-regulation) with later amendments. Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH Regulation), with later amendments. Norwegian regulations on waste. no. 930/2004, from the Ministry of Environment. Dangerous Goods regulations.
Declaration No.	Marine Gassolje 500 ppm: P-24028; GO 500ppm Base: P-614552; GO 500ppm Farget Base: P-170498

15.2. Chemical safety assessment

Chemical safety assessment performed	Yes

SECTION 16: Other information

Supplier's notes	The information contained in this SDS must be made available to all those who handle the product.
List of relevant H-phrases (Section 2 and 3)	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H351 Suspected of causing cancer

	H373 May cause damage to organs through prolonged or repeated exposure 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.
Key literature references and sources for data	Suppliers Safety data sheet dated: 16.06.2015
Abbreviations and acronyms used	ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road DNEL: Derived No Effect Level EWC: European Waste Code (a code from the EU's common classification system for waste) IATA: The International Air Transport Association ICAO: The International Civil Aviation Organisation IMDG: The International Maritime Dangerous Goods Code Log Pow: Partition coefficient: n-octanol / water PBT: Persistent, Bioaccumulative and Toxic RID: The Regulations concerning the International Carriage of Dangerous Goods by Rail vPvB: very Persistent and very Bioaccumulative
Information added, deleted or revised	Version: 2. Amendment, section: 1, 9 and 16.
Checking quality of information	This SDS is quality controlled by Kiwa Teknologisk Institutt in Norway, certified according to the Quality Management System requirements specified in ISO 9001:2008.
Version	2
Prepared by	Kiwa Teknologisk Institutt as v/ Johan K. Rian