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[Prepared according to Regulation (EC) 1907/2006 (REACH) and 2015/830]

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

1.1 Product identifier GENERAL PURPOSE OIL	
1.2 Relevant identified uses	s of the substance or mixture and uses advised against
Identified uses:	Protection against atmospheric corrosion for surface of precision metal products. This product
	has anti-corrosive, antioxidant and lubricating properties.
Uses advised against:	Not determined.
1.3 Details of the supplier of	of the safety data sheet
Supplier:	NANOOIL D.DOMAGAŁA, J.ZALEGA SP.J
Address:	ul. Westerplatte 8, 32-500 Chrzanów, Poland
Phone:	+ 48 730 536 200

E-mail address of competent person responsible for this Material Safety Data Sheet: biuro@nanooil.pl

1.4 Emergency telephone number

112 (General Emergency Phone), 998 (Fire Department), 999 (Emergency Medical Service)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Aerosol 1 H222-229, Skin Sens. 1 H317, Asp. Tox. 1 H304*

Extremely flammable aerosol. Pressurised container: may explode if heated. May cause an allergic skin reaction. May be fatal if swallowed and enters airways.

* Aerosol products are not labelled in this hazard class.

2.2 Label elements

Hazard pictograms and signal word



Names of dangerous substances indicated on the label

This product contains the following: Benzenesulfonic acid, C10-C14 dialkyl derivatives, calcium salts; distillates (petroleum) hydrotreated light naphthenic.

Hazard Statements	
H222	Extremely flammable aerosol.
H229	Pressurised container: May explode if heated.
H317	May cause an allergic skin reaction.
Precautionary Statements	
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe spray.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P302 + P352	IF ON SKIN: Wash with plenty of water with soap.
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention.



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2.3 Other hazards

Mixture components do not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH.

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Hazardous substance na concentration range	ime and	Identifier	Classification
Distillates (petroleum) hydrotreated light naphthenic Base oil — unspecified	< 40%	CAS No. 64742-53-6 EC No. 265-156-6 REACH registration number: 01-2119480375-34-XXXX	Asp. Tox. 1 H304
Propane	< 40%	CAS No. 74-98-6 EC No. 200-827-9 REACH registration number: 01-2119486944-21-XXXX	Flam. Gas 1 H220 Press. Gas H280
Butane	< 40%	CAS No. 106-97-8 EC No. 203-448-7 REACH registration number: 01-2119474691-32-XXXX	Flam. Gas 1 H220 Press. Gas H280
C10-C13 hydrocarbons, n- alkanes, isoalkanes, cyclic, aromatics <5%	1-5%	CAS No Reference No ECHA: 918-481-9 REACH registration number: 01-2119457273-39- XXXX	Asp. Tox. 1 H304
Benzenesulfonic acid, C10-C14 dialkyl derivatives, calcium salts	< 2%	CAS No Reference No ECHA: 939-603-7 REACH registration number: 01-2119978241-36- XXXX	Skin Sens. 1 H317

1) Based on Note L, mineral oils used in the production are not classified as carcinogenic. The content of polycyclic aromatic hydrocarbons (PAHs) tested according to IP 346 (DMSO extract method) is <3%. Full text of H-phrases is given in Section 16

Section 4: First aid measures

4.1 Description of first aid measures

Skin contact: Immediately remove contaminated clothing. Wash contaminated skin with plenty of soapy water. Consult a doctor if disturbing symptoms appear.

<u>Eye contact</u>: Consult a doctor if irritation occurs. Keep non-irritated eye, remove contact lenses. Thoroughly wash contaminated eyes with water for 10-15 minutes. Avoid strong water jet - risk of damage to the cornea.

<u>Swallowing:</u> This route of exposure is not anticipated. If swallowed, rinse mouth with water. **Do not induce vomiting!** Never give anything by mouth to an unconscious person. Consult a doctor, show the label.

Inhalation: Consult a doctor. Remove the injured person to fresh air, keep warm and at rest.



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4.2 Most important symptoms and effects, both acute and delayed

In contact with eyes: Redness, tearing, burning, blurred vision.

<u>In contact with skin</u>: Frequent and prolonged contact may cause defatting, flushing, inflammation and allergic reactions. <u>Inhalation</u>: Aerosol can cause irritation of the respiratory tract and nose, dizziness, weakness, fatigue, nausea, headache, narcotic effect, drowsiness.

4.3 Indication of any immediate medical attention and special treatment needed

Decision on the rescue procedure is taken by a doctor following thorough examination of the injured person.

Section 5: Firefighting instructions

5.1 Extinguishing media

<u>Suitable extinguishing media:</u> CO₂, extinguishing powder, sand, spray water jet. <u>Unsuitable extinguishing media:</u> Full water jet.

5.2 Special hazards arising from the substance or mixture

In case of fire, irritant and toxic vapours and gases may be released: carbon oxides and other unidentified products of thermal decomposition. Avoid breathing combustion products, they may be hazardous for health.

5.3 Advice for fire-fighters

General protection measures typical as in the case of fire. Do not stay in the fire zone without suitable chemical-resistant clothing and self-contained breathing apparatus. After fire extinguishing, prevent wastewater from enter drains, surface and ground water. Container under pressure - danger of explosion at high temperatures. Gas can accumulate near the ground surface and move on long distances causing danger of fire or explosion. Cool off endangered containers with spray water jet at a safe distance.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Limit the access of bystanders to the endangered area until relevant cleaning procedures are finished. Ensure that breakdown and its results are eliminated by a properly trained staff only. Isolate the endangered area in the case of great leakage. Use individual protection measures. Avoid skin and eye contamination. Provide adequate ventilation. Do not inhale vapours/aerosols. Impose ban on smoking and on use of open flames and sparking equipment.

6.2 Environmental precautions

If larger quantities were released, precautions should be taken to avoid spreading the product in natural environment. Inform the appropriate emergency services.

6.3 Methods and materials for containment and cleaning up

Contain spill with non-combustible absorbent materials (e.g. sand, earth, universal binding material, silica, etc.) and place in waste containers. Collected material dispose as waste. Clean contaminated area using detergents. Do not use solvents.

6.4 Reference to other sections

For disposal of product - see Section 13. Personal protective equipment - see Section 8.



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Section 7: Handling and storage

7.1 Precautions for safe handling

Observe official regulations on safety and health protection. Avoid contact with the eyes and skin. Avoid breathing spray. Provide adequate general and/or local ventilation. Use individual protection measures. Eliminate sources of ignition - Do not use open flames, do not smoke, do not use sparking tools or clothing made from fabrics susceptible to static charge; Protect the tanks against heat, install explosion-proof electrical equipment. Do not spray on a naked flame or any incandescent material.

7.2 Conditions for safe storage, including any incompatibilities

Store only in dry and well-ventilated place below 50°C. Keep away from sources of fire and heat. Do not smoke and do not use open flames or sparking tools in the warehouse. Provide explosion-proof ventilation. Keep away from food, foodstuffs and animal feed. Protect from direct sunlight.

7.3 Specific end uses

No information on applications other than those listed in subsection 1.2.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Specification	TLV	TLV-STEL	TLV-CL	BLV
Butane	1900 mg/m ³	3000 mg/m ³	_	
Highly refined mineral oils excluding machined liquids - breathable fraction	•	_		_
Propane	1800 mg/m ³	_	—	

Legal basis: Journal of Laws of 2014, item 817, with subsequent amendments)

Recommended monitoring procedures

Use procedures for monitoring concentrations of hazardous components in air and procedures for monitoring workplace air pollution - if available and justified on a given workplace - in accordance with relevant Polish or European Standards, taking into account the exposure conditions and appropriate measurement methodology adapted to the work conditions. Mode, type and frequency of tests and measurements should meet the requirements of the Regulation of the Minister of Health of 2 February 2011 (Journal of Laws No. 33, item 166).

8.2. Exposure controls

Observe the general safety and hygiene rules. Avoid contact with the eyes and skin. Remove immediately contaminated clothing. In the workplace, general and/or local ventilation should be provided to maintain the concentration of the harmful agent in the air below established limit values. Do not eat, do not drink, do not smoke and do not take medicines while using the product. Wash hands before break and after finishing work.

Hand and body protection

Wear chemical resistant protective gloves and protective clothing. Material recommended for gloves: viton. In case of short-term exposure, wear protective gloves with performance level 2 or greater (breakthrough time> 30 min.) In case of long-term exposure, wear protective gloves with performance level 6 or greater (breakthrough time> 480 min.)

Material of gloves must be impermeable and resistant to the product. Glove material should be selected with consideration to the breakthrough times, permeability rate and degradation. In addition, the choice of suitable gloves does not only depend on the material but also on other qualitative characteristics and varies from manufacturer to manufacturer. Contact manufacturer of gloves for information on the accurate breakthrough time and observe it. It is recommended to change gloves regularly and replace them immediately if any signs of wear or damage or changes in appearance (colour, flexibility, shape) occur.

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Eye protection

Tight safety goggles if a risk of eye contamination exists.

Respiratory protection

In the case of inadequate ventilation and exceeded TLV values, use suitable exhaust or absorbing and filtering equipment of appropriate protective class (class 1/protection against gases or vapours at volume concentration in air not exceeding 0.1%; class 2/protection against gases or vapours at volume concentration in air not exceeding 0.5%, class 3/protection against gases or vapours at volume concentration in air not exceeding 0.5%, class 3/protection against gases or vapours at volume concentration in air is < 17% and/or max. concentration of toxic substances in air is > 1.0% vol.

The applied personal protection measures have to meet the requirements included in the Regulation of the Minister of Economy of 28 December 2005 (Journal of Laws No. 259, item 2173) and Directive 89/686/EC (with subsequent amendments). The employer is obliged to ensure protection measures suitable for the operations being performed and meeting all the quality requirements, including maintenance and cleaning.

Environmental exposure controls

Substances		in air, averaged over period	Acceptable masses of substances that can be discharged in treated industrial	
	One hour	Calendar year	wastewater	
Aliphatic hydrocarbons	3000 μg/m ³	1000 μg/m³	15 mg/l	
Aromatic hydrocarbons	3000 μg/m ³	1000 μg/m ³	15 mg/l	

Legal basis: Journal of Laws of 2010 No. 16, item 87; Journal of Laws of 2012 No. 0, item 1031; Journal of Laws of 2014, item 1800.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Colour: Odour: Odour threshold: pH: Melting/Freezing point: Initial boiling point: Ignition temperature: Evaporation rate: Flammability (solid, gas): Upper/Lower explosive limit: Vapour pressure (20°C): Vapour density (air = 1): Density (20°C): Solubility:	Aerosol Amber Characteristic Not determined -45°C Not determined < 0°C Not determined Extremely flammable 8.4%/1.8% vol. (propellant) Not determined Not determined Not determined 0.870 g/m ³ Insoluble in water, soluble in organic solvents.
Density (20°C):	0.870 g/m ³
Partition coefficient: n-octanol/water: Auto-ignition temperature: Decomposition temperature: Explosive properties: Oxidising properties: Viscosity, dynamic:	Not determined Not determined Forms explosive mixtures with air Does not show Not determined

9.2 Other information

No additional research was carried out.



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Section 10: Stability and reactivity

10.1 Reactivity

The product is reactive and hazardous polymerization does not occur. Vapours may form explosive mixtures with air.

10.2 Chemical stability

This product is stable if it is properly used and stored.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

Avoid heat sources and direct sunlight.

10.5 Incompatible materials

Avoid contact with strong oxidants.

10.6 Hazardous Decomposition Products

If this product is properly used and stored, it releases no hazardous decomposition products.

Section 11: Toxicological information

11.1 Information on toxicological effects

<u>Acute toxicity</u> Based on available data, the classification criteria are not met.

Skin corrosion/irritation Based on available data, the classification criteria are not met.

<u>Serious eye damage/irritation</u> Based on available data, the classification criteria are not met.

<u>Respiratory or skin sensitisation</u> This product contains components that can cause allergic skin reaction in people with allergic sensitivities.

<u>Germ cell mutagenicity</u> Based on available data, the classification criteria are not met.

<u>Carcinogenicity</u> Based on available data, the classification criteria are not met.

<u>Reproductive toxicity</u> Based on available data, the classification criteria are not met.

<u>STOT-single exposure</u> Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard

This product contains low viscosity components classified as posing an aspiration risk upon ingestion. However, due to the form of the product, which prevents accidental swallowing, the whole product does not pose the aspiration risk to the lungs.

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Section 12: Ecological information

12.1 Toxicity

This product is not classified as hazardous to the environment.

12.2 Persistence and degradability

No data available for the mixture.

12.3 Bioaccumulative potential

No bioaccumulation is to be expected.

12.4 Mobility in soil

The product has low mobility in aquatic environment and soil. Gas components quickly spread in the air.

12.5 Results of PBT and vPvB assessment

Components of the mixture are not considered as PBT or vPvB substances.

12.6 Other adverse effects

This product does not affect global warming and ozone layer damage.

Section 13: Disposal considerations

13.1 Waste treatment methods

<u>Product disposal</u>: Do not enter drains. Disposal must be carried out in accordance with official regulations. Waste code should be determined at the place of generation of the waste.

<u>Used packaging disposal:</u> Recovering / recycle / disposal of packaging waste must be carried out in accordance with applicable regulations. Do not pierce or burn, even after use. Waste Code: 15 01 11* (Metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers).

Community legal acts: European Parliament and Council Directives: 2008/98/EC i 94/62/EC.

Country-specific legal acts: Journal of Laws of 2013, item 21, with subsequent amendments; Journal of Laws of 2013, item 888, with subsequent amendments

Section 14: Transport information

14.1 UN number UN 1950 (LQ 1L)

14.2 UN proper shipping name AEROSOLS, flammable.

14.3 Transport hazard classes 2 (label 2.1)

14.4 Packing group

Not applicable.

14.5 Environmental hazards

The mixture poses no threat to the environment according to the criteria set out in the transport regulations.

14.6 Special precautions for users

Packages shall not be thrown or subjected to impact. Containers should be placed on the vehicle or in the shipping box so as to prevent them from falling down or dropping. Avoid heat sources.





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14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable.

Section 15: Regulatory information

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

Act of 25 February 2011 on chemicals and their mixtures (Journal of Laws of 2011 No. 63, item 322, with subsequent amendments); Ordinance of the Minister of Work and Social Policy of 6 June 2014 on the maximum occupational levels and intensities of factors harmful to health in the working environment. (Journal of Laws of 2014, item 817);

European Agreement concerning the international carriage of dangerous goods by road (ADR);

Act of 14 December 2012 on wastes (Journal of Laws of 2013, item 21, with subsequent amendments);

Act of 13 June 2013 on packages and package wastes (Journal of Laws of 2013, item 888, with subsequent amendments);

Ordinance of the Minister of Environment of 9 December 2014 on the catalogue of waste (Journal of Laws of 2014, item 1923); Ordinance of the Minister of the Economy of 21 December 2005 on basic requirements for personal protection measures (Journal of

Laws No. 259, item 2173);

Ordinance of the Minister of Health of 2 February 2011 on tests and measurements of factors harmful to life in the working environment (Journal of Laws No. 33, item 166);

Ordinance of the Minister of the Economy of 5 November 2009 on detail requirements for aerosol products (Journal of Laws No. 188, item 1460, with subsequent amendments);

2015/830/EC 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);

1907/2006/EC Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EU and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, , with subsequent amendments;

1272/2008/EC Regulation of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives: 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, with subsequent amendments;

2008/98/EC Directive of European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives; **94/62/EC** Directive of European Parliament and of the Council of 20 December 1994 on packages and package wastes;

15.2 Chemical Safety Assessment

No chemical safety assessment is required for the mixture.

Section 16: Other information

Full text of H-statements from Section 3 of this Material Safety Data Sheet		
H220	Extremely flammable gas.	
H280	Contains gas under pressure; may explode if heated.	
H304	May be fatal if swallowed and enters airways.	
H317	May cause an allergic skin reaction.	

Abbreviations and acronyms

TLV-TWA	Threshold Limit Value
TLV-STEL	Threshold Limit Value, Short Term Exposure Limit
TLV-C	Ceiling exposure limit
BLV	Acceptable Biological Concentration
PBT	Persistent, bioaccumulative, and toxic (substance)
vPvB	very Persistent, very Bioaccumulative (substance)
Flam. Gas 1	Gas flammable, category 1
Press. Gas	Gas under pressure
Asp. Tox.1	Aspiration hazard, category 1
Skin Sens.1	Skin sensitization, category 1



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<u>Training</u>

Before working with the product, a user should get acquainted with occupational safety regulations related to chemicals handling, and especially have special proper workplace training. Persons involved in transport of hazardous materials under the ADR Agreement should be adequately trained in their duties (general training, workplace training and safety training).

References to key literature and data sources

This Material Safety Data Sheet was developed on the base of the safety data sheet provided by the manufacturer, bibliographic data, online databases (eg. ECHA, TOXNET, COSING) and knowledge and experience and with taking into account the current legislation in force.

Additional Information

Classification was carried out on the base of data related to the content of hazardous constituents by means of a calculation method and according to guidelines of Regulation 1272/2008/EC (CLP) with subsequent amendments.

Prepared by: mgr Aleksandra Gendek

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