	MATERIAL SAFETY DATA SHEET prepared according to the Commission Regulation (EU) No 830/2015	Prepared on: 09.03.2009
		Revision date: 27.11.2020
	BASE OIL N-150, BASE OIL 150	Version: 7.2 CLP
		Page 1 z 10

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

1.1. Product identifier

Trade name: **BASE OIL N-150, BASE OIL 150**

Name: Heavy distillates (paraffin), hydrotreated (petroleum); Baseoil - unspecified;

Synonyms: Distillates (petroleum), hydrotreated heavy paraffinic

CAS No. 64742-54-7

EC No. 265-157-1

Index No. 649-467-00-8

Registration No. NA. Recovered Base Oil. The substance exempted from registration according to Art. 2 Para. 7 d) of the REACH Regulation.

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

Base oil for lubricating oils production.

1.3. Details of the supplier of the Safety Data Sheet

Manufacturer: **ORLEN Południe S.A.**

Address: ul. Fabryczna 22, 32-540 Trzebinia

Telephone/Fax: +48 24 201 00 00 / +48 24 367 74 14

Email: reach.poludnie@orlen.pl

1.4. Emergency telephone number:

(+48) 998 lub 112 (from mobile phone)

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Hazard	Classification	
		complying with Regulation (EC) No. 1272/2008 (CLP)
resulting from physicochemical properties:		not classified
to man:		not classified
		Pursuant to L note, the substance is not classified as carcinogenic. DMSO extract content (acc. to IP 346) < 3%. Based on viscosity, the substance does not produce hazard caused by aspiration.
to the environment:		not classified

2.2. Label elements

Pictogram: none


Signal word: none

Hazard statements: none

Precautionary statements: none

2.3 Other hazards

The substance does not meet the PBT or vPvB criteria laid down in Annex XIII of the REACH Regulation.

	MATERIAL SAFETY DATA SHEET prepared according to the Commission Regulation (EU) No 830/2015	Prepared on: 09.03.2009
	BASE OIL N-150, BASE OIL 150	Revision date: 27.11.2020
		Version: 7.2 CLP
		Page 2 z 10

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

<u>Name of the substance</u>	<u>Formula</u>	<u>Weight per cent</u>	<u>CAS No.</u>	<u>EC No.</u>	<u>Index No.</u>
1. Baseoil unspecified	- NA	100	64742-54-7	265-157-1	649-467-00-8

1. A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C₂₀ through C₅₀ and produces a finished oil of at least 19 mm²/s (cSt) at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.

2. A complex combination of hydrocarbons obtained by hydrofinishing used lubricating oil in the presence of a catalyst. It consists of hydrocarbons having carbon numbers in the range of C₁₅ through C₅₀.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation :

Remove victim from the contaminated area to fresh air. Secure quite and comfort, (cover with a blanket, thermal blanket or another suitable cover). In case of breathing disorders give a self contained apparatus; in case of no breath apply artificial respiration. Avoid mouth-to-mouth resuscitation due to rescuer's hazard of exposure into product vapours getting out of victim's airways. In case of loss of consciousness, breathing disorders or constant feeling badly, provide medical aid immediately.

Skin contact:

Take off the contaminated clothing. Wash contaminated skin thoroughly using water with soap. In case of occurrence of and regular irritation symptoms, consult a physician.

Eye contact:

Flush contaminated eyes immediately with continuous water stream for about 15 minutes. Workers that can be so contaminated should be trained in eye self-flushing. Ophthalmologist's advice necessary.

Swallowing:

Secure medical aid immediately. Ensure that airways are patent. Place the victim in the recovery position. Do not serve milk, fat, liquor. A conscious person may be served with approx. 200 ml of liquid paraffin. Do not serve anything through oral route to an unconscious person. Do not induce vomiting.


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

Not specified.

4.3 Indication of any immediate medical attention and special treatment needed

Show the Material Safety Data Sheet and the label/packaging to the medical personnel providing aid.

Instructions for a physician: symptomatic treatment.

	MATERIAL SAFETY DATA SHEET prepared according to the Commission Regulation (EU) No 830/2015	Prepared on: 09.03.2009
		Revision date: 27.11.2020
	BASE OIL N-150, BASE OIL 150	Version: 7.2 CLP
		Page 3 z 10

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: carbon dioxide, extinguishing powder, foam, spray current water jet

Unsuitable extinguishing media: shut current water jet. Hazard of burning liquid spread on the water surface. In case of burning containers, eruption of the burning product with a lot of force is possible.

5.2. Special hazards arising from substance or mixture

Inflammable product (flammable product of high ignition temperature). Product ignition however is possible when heated very much, e.g. during fire within the place of storage surroundings. Oil mist is also flammable. In case of fire, notify the neighbourhood; remove any outsiders not taking part in extinguishing off the endangered area. Order evacuation, if necessary. Call the fire brigade, rescue teams, the police. Only trained, equipped with appropriate clothing and protective equipment people may take part in the rescue operation. Products of incomplete combustion is carbon monoxide.

5.3. Advice for fire-fighters

Extinguish small fires with powder or snow extinguishers.

Extinguish big fires with foam or spray current water jet.

Cool down neighbouring containers and packaging, spraying water from the safe distance.

If lack of hazard is not confirmed, secure apparatus for airways insulation. Use fire protective suits as basic means of protection.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Let the neighbourhood know about the breakdown. Remove any people not taking part in liquidation of effects of the accident from the threatened area. Order evacuation, if necessary. Call the fire brigade, rescue teams and the police. Only trained people with suitable clothing and protective equipment may take part in the rescue operation.

Remove ignition sources. No smoking. Avoid direct contact with skin and eyes. Do not inhale product vapours. Apply personal protection – see Section 8 of the Material Safety Data Sheet.

6.2. Environmental precautions

Do not let the product leak into inspection chambers, waters, groundwaters and basins. In case of leak into inspection chambers, waters, groundwaters and basins, notify competent authorities.

6.3. Methods and materials for containment and cleaning up

Put an embankment of sand or another absorptive material around the released material. Collect into an emergency packaging. Utilize or treat in compliance with binding regulations. Flush the contaminated surface with water.


6.4 References to other sections

Refer also to Sections 8, 13 of the Material Safety Data Sheet.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid inhalation of vapours, contacts with skin and eyes. Work in well ventilated rooms. Do not let the oil mist produce, especially in pressure systems, having in mind that the fire

	MATERIAL SAFETY DATA SHEET prepared according to the Commission Regulation (EU) No 830/2015	Prepared on: 09.03.2009
		Revision date: 27.11.2020
	BASE OIL N-150, BASE OIL 150	Version: 7.2 CLP
		Page 4 z 10

hazard grows at the oil mist concentration reaching the level of approx. 45 g/m³. Observe the no smoking and no open flame rules. Apply personal precaution according to Section 8 of the Material Safety Data Sheet.

Observe basic rules of hygiene: do not eat, drink or smoke at the workplace. Exchange the product-contaminated clothing immediately into the clean one. The product is perfectly absorbed through undamaged skin. Do not let spill over, especially over large body spaces. Having finished work, always wash hands with water and soap.

7.2. Conditions for safe storage, including any incompatibilities

Store in original, closed tightly and labelled properly packaging or containers for the product use. The base for storage should be non-absorbable. Ensure suitable ventilation. Observe prohibitions of smoking, using open flame within the plant area. These storage conditions concern also empty non-cleaned packaging. Provide training to anyone, who has contact with the product, in physicochemical properties of the substance and hazards resulting from these properties.

7.3. Specific end use(s)

NA

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Mineral oils (aerosol liquid phase) TLV: 5 mg/m³, TLV-STEL: 10 mg/m³, TLV-CL: –
 Polish Regulation: Rozporządzenie Ministra Rodziny, Pracy i Polityki Społecznej z dnia 12 czerwca 2018 r. w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy.

DNEL _{employee} (inhalation, chronic toxicity)	5.4 mg/m ³ /8 h (aerosol)
DNEL _{consumer} (inhalation, chronic toxicity)	1.2 mg/m ³ /24 h (aerosol)
PNEC _{water, sediment, soil, water treatment plant}	NA (the substance does not produce hazard)
PNEC (oral route, mammals)	9.33 mg/kg of food

8.2. Exposure controls

Appropriate engineering controls

Local blowing out installation removing vapors from product emission places as well as general ventilation of rooms are necessary. Keep workplaces clean, tidy and in order.

Eye / face protection:

Protective glasses in tight casing or a face cover.


Skin protection:

Protective gloves of perbunan, viton or butyl rubber. It is recommended to change gloves regularly and immediately replace them if there are any signs of wear, damage (tearing, perforation) or changes in appearance (color, elasticity, shape). The choice of class resistance to penetration depends on the time of exposure to the agent and should be selected in accordance with EN 373. The thickness of the gloves specified by the manufacturer on the basis of class exposure to penetration. Protective clothing of a blouse fastened up to the neck and fastened cuffs, trousers turned down on boots. Protective, anti-skidding and oil-resistant footwear. Trousers turned down on boot cuffs.

Respiratory protection:

Not required in regular work conditions at suitable ventilation. In case of insufficient ventilation, use masks with type A absorbent or apparatus insulating airways.

Thermal hazards

	MATERIAL SAFETY DATA SHEET prepared according to the Commission Regulation (EU) No 830/2015	Prepared on: 09.03.2009
		Revision date: 27.11.2020
	BASE OIL N-150, BASE OIL 150	Version: 7.2 CLP
		Page 5 z 10

NA

Environmental exposure controls:

It should be considered to apply precautions, in order to protect the area around storage containers.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

- a) appearance: : liquid; colour: from colourless up to the straw-coloured
- b) odour : typical for oils
- c) odour threshold : no details, subjective feeling
- d) pH : NA
- e) melting/freezing point : up to -12°C (-60 – 0°C *)
- f) initial boiling point and boiling range : 250 up to >350°C (200 – 800°C *)
- g) flash point : min. 190 °C
- h) evaporation rate : no data - Not defined in the CSR
- i) flammability (solid, gas) : NA
- j) lower/upper flammability or explosive limits : NA
- k) vapour pressure : <0.1 hPa at 20°C
- l) vapour density : no details
- m) density : 0,850 – 0,880 g/cm³ at 15°C
(0.81 – 0.97 g/cm³*)
- n) solubility : NA
- o) partition coefficient: n-octanol/water : NA
- p) auto – ignition temperature : NA
- q) decomposition temperature : no data - Not defined in the CSR
- r) viscosity : 28 - 35 mm²/s w 40°C
- s) explosive properties : NA
- t) oxidizing properties : NA

*ranges are shown for substances belonging to the same registration group

9.2. Other information

Surface tension : NA

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

The substance is not reactive.

10.2. Chemical stability

The substance is stable in normal ambient conditions and at predicted temperature and under predicted pressure when stored and handled.

10.3. Possibility of hazardous reactions

Not known.


10.4. Conditions to avoid:

High temperature, open flame and other ignition sources.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

	MATERIAL SAFETY DATA SHEET prepared according to the Commission Regulation (EU) No 830/2015	Prepared on: 09.03.2009
		Revision date: 27.11.2020
	BASE OIL N-150, BASE OIL 150	Version: 7.2 CLP
		Page 6 z 10

Not known. For products of combustion producing hazard see Section 5 of the Material Safety Data Sheet.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:

LD50: >5000 mg/kg (oral route, rat)
 LC50: > 5.53 mg/l (inhalation route, rat)
 LD50: >5000 mg/kg (dermal route, rabbit)

Skin corrosion/irritation:

Basing on the available data, the classification criteria are not met. Causes skin degreasing and irritation. Skin cracking, drying and flaking at longer contact. Inflammations or even chemical burns possible.

Serious eye damage/eye irritation:

Basing on the available data, the classification criteria are not met. High vapour/mist concentrations or spraying liquid into the eye can cause irritations to mucous membranes of the eye (burning, reddening, watering) or temporary eye irritation.

Respiratory or skin sensitization:

Basing on the available data, the classification criteria are not met.

Germ cell mutagenicity:

Basing on the available data, the classification criteria are not met.

Carcinogenicity:

Basing on the available data, the classification criteria are not met. Pursuant to Note L, the substance is not classified as carcinogenic (DMSO extract content (acc. to IP 346) < 3%).

Reproductive toxicity:

Basing on the available data, the classification criteria are not met.

STOT (specific target organ toxicity) – single exposure:

Basing on the available data, the classification criteria are not met.

Burning sensations in throat and oesophagus, stomach aches, vomiting. Liver poisoning temporary symptoms. Exposure to vapours of the heated product or aerosol causes eye watering, reddening of conjunctiva, cough. At high concentrations, it can cause headaches and vertigos, psychomotor agitation, balance disorders, nausea, vomiting, drowsiness, consciousness disorders, convulsions. In case of work in containers with product vapours, high concentrations that take place there cause quick loss of consciousness and demise.


STOT – repeated exposure:

Basing on the available data, the classification criteria are not met. Repeating or long lasting exposure can cause skin drying, cracking or chronic skin inflammation conditions. Headaches and vertigos, excessive sensitivity, sleeping disorders and trembling hands can occur. Skin inflammation conditions.

Aspiration hazard

Basing on the available data, the classification criteria are not met. Viscosity > 20.5 mm²/s at 40°C

SECTION 12. ECOLOGICAL INFORMATION

	MATERIAL SAFETY DATA SHEET prepared according to the Commission Regulation (EU) No 830/2015	Prepared on: 09.03.2009
		Revision date: 27.11.2020
	BASE OIL N-150, BASE OIL 150	Version: 7.2 CLP
		Page 7 z 10

12.1. Toxicity

Aquatic environment

EC50: > 10000 mg/l – acute toxicity screening test on freshwater invertebrates; *Daphnia magna*, 48h

NOEL: 100 mg/l – chronic toxicity screening test on invertebrates; *Daphnia magna*, 21 days

EC50: > 100 mg/l - acute toxicity screening test for freshwater algae; *Pseudokirchnerella subcapitata*, 72 h

LC50: > 100 mg/l - acute toxicity screening test for freshwater fish; *Pimephales promelas*, 96h

NOEL: > 1000 mg/l - chronic toxicity screening test on fish; *Oncorhynchus mykiss*, QSAR, 28 days

Sediment:

Toxicity screening test on sediment organisms: no (test scientifically unjustified)

Land environment:

Toxicity screening test on invertebrates: no (test scientifically unjustified)

Toxicity screening test on plants: no (test scientifically unjustified)

Toxicity screening test on birds: no (test scientifically unjustified)

12.2. Persistence and degradability

Biotic:

Biodegradability: not readily biodegradable (2 – 31% in 28 days)

Activated sludge test: NA – UVCB substance

Abiotic:

Hydrolysis as pH function: no occurrence

Photolysis/phototransformation: no occurrence

12.3. Bioaccumulative potential

NA – UVCB substance

12.4. Mobility in soil


Adsorption/desorption testing – NA - UVCB substance.

12.5. Results of PBT and vPvB assessment

The substance does not meet the PBT or vPvB criteria laid down in Annex XIII to the REACH Regulation.

12.6. Other adverse effects

Product of a very low volatility. Hydrocarbons being its components have either low or none tendency to evaporate into the atmosphere. Admissible content in effluents discharged to waters and ground: oil-derived substances – 15 ml/l. Admissible environment pollution standards within the framework of currently binding regulations should be observed.

	MATERIAL SAFETY DATA SHEET prepared according to the Commission Regulation (EU) No 830/2015	Prepared on: 09.03.2009
	BASE OIL N-150, BASE OIL 150	Revision date: 27.11.2020
		Version: 7.2 CLP
		Page 8 z 10

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste code: **13 02 05*** mineral-based non-chlorinated engine, gear and lubricating oils

Do not dispose into sewerage. Do not allow surface and groundwaters pollution. Consider any possibility of utilization. Waste product should be recovered or disposed in licensed incineration or treatment / disposal plants according to regulations in force.

Give empty disposable packaging to a licensed waste recipient. Empty multiple use packaging may be used again, if necessary, after cleaning.

Act on Wastes of 14 December 2012 (Journal of Laws No. 2013 item 21).

Act of 13 June 2013 on Packaging and Packaging Wastes (Journal of Laws No. 2013 item 888).

Regulation of the Minister of the Environment of 27 September 2001 on the catalogue of wastes (Journal of Laws No. 112 item 1206 as amended).

SECTION 14. TRANSPORT INFORMATION

The substance is not ruled by regulations concerning transport of dangerous goods provided for in ADR (road), RID (rail), AND (inland), IMDG (sea), ICAO/IATA (air) transport regulations.

14.1. UN number	NA
14.2. UN proper shipping name	NA
14.3. Transport hazard class(es)	NA
Hazard Identification Number	NA
Warning label	NA
14.4. Packing group	NA
14.5. Environmental hazards	NA
14.6. Special precautions for user:	NA
ADR	
14.7. Transport in bulk according to Annex II to MARPOL and the IBC Code	NA

SECTION 15. REGULATORY INFORMATION

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


Act of 25 February 2011 on substances and chemical preparations (uniform text in Journal of Laws of 2011 No. 63, item 322).

Regulation of the Minister of Family, Labor and Social Policy of 12 June 2018 regarding the highest permissible concentrations and intensities of harmful factors in the work environment

Act of 14 December 2012 on waste. (Journal of Laws of 2013, item 21).

Regulation of the Minister of the Environment of 27 September 2001 on the catalogue of wastes (Journal of Laws No. 112 item 1206 as amended).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission

	MATERIAL SAFETY DATA SHEET prepared according to the Commission Regulation (EU) No 830/2015	Prepared on: 09.03.2009
		Revision date: 27.11.2020
	BASE OIL N-150, BASE OIL 150	Version: 7.2 CLP
		Page 9 z 10

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 (corrigendum in OJ L 136 of 29.5.2007 as amended).

Regulation (EC) No 1272/2008 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 (OJ L No 353 of 31.12.2008 as amended).

Regulation (EC) No 830/2015 of the European Parliament and of the Council of 28 May 2015 on amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Regulation, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

The manufacturer performed the chemical safety assessment – assessment results are specified in chemical safety report for the substance.

SECTION 16. OTHER INFORMATION

Changes due to revision:

Update of sections 8, 9 and 15.

Key to abbreviations and acronyms used in the Safety Data Sheet

TLV	threshold limit value
TLV-STEL	threshold limit value - short term exposure limit
TLV-CL	threshold limit value – ceiling exposure limit
vPvB	very persistent and very bioaccumulative (substance)
PBT	persistent, bioaccumulative and toxic (substance)
PNEC	predicted no-effect concentration
DN(M)EL	derived no-effect level
LD ₅₀	lethal dose (at which 50% of tested animals will die)
LC ₅₀	lethal concentration (at which 50% of tested animals will die)
LOEC	lowest observed effect concentration
NOEL	no observed adverse effect level
RID	International Rule for Transport of Dangerous Substances by Railway
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
UVCB	substances of unknown or variable composition, complex reaction products or biological materials
NA	not applicable

Literature references and sources for data


Legal regulations as listed in Sections 2 – 15 of the Material Safety Data Sheet
 Substance chemical safety report

List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements – not listed in Sections 2 – 15 of the Material Safety Data Sheet

No

Advice on training for workers

Workers making use of the product should be trained in risk to health, hygienic requirements, applying personal protection, actions preventing from accidents, rescue procedures, etc.

	MATERIAL SAFETY DATA SHEET prepared according to the Commission Regulation (EU) No 830/2015	Prepared on: 09.03.2009
		Revision date: 27.11.2020
	BASE OIL N-150, BASE OIL 150	Version: 7.2 CLP
		Page 10 z 10

Exposure scenarios: none. The substance released from registration under Article 2 Para. 7 d) of the REACH Regulation.

The Material Safety Data Sheet is prepared on the basis of details provided by manufacturers of product compounds, national regulations in force at preparing the Material Safety Data Sheet and own knowledge. Information in the Material Safety Data Sheet should be treated only as a form of aid for safe use and proceedings in transport, distribution and storage. The Material Safety Data Sheet is not a certificate of quality for the product. Information in the Material Safety Data Sheet relates only to the product concerned and may not be referred to similar products. The Material Safety Data Sheet provider shall not bear liability resulting from inappropriate use of information in the Material Safety Data Sheet.