

USED OIL ACCEPTANCE CRITERIA

General used oil acceptance criteria
& Laboratory services



ONE COMPANY - MULTIPLE SERVICES

Certified according to EfBV, ISO 9001, ISO 14001, ISO 50001

Innovative and safe solutions for the collection of used oils are an investment in the future. Up to 100% of our collected waste oils are sustainably re-refined into high-quality lubricants. Safety thanks to the latest technical equipment in our special tankers and tank wagons.

Used oils and emulsions are the core of our business. Brake fluid, radiator antifreeze and other garage waste is handled by our partners. Our fleet of tankers is deployed in Europe and the USA for companies of all sizes and in all sectors.

Perspectives in harmony with economy and ecology - our re-refining technology. Our zero-waste production of base oils is unique in the world. High-quality, synthetic components of the used oil are retained. Guaranteed: Highest quality of the base oil and reduced use of additives in the refining process to produce high-quality lubricants.

The outstanding CO₂ reduction compared to conventional base oil production is also unique: it amounts to 30%. This means that the production of one tonne of base oil saves around 836 kg of CO₂.

Our refineries in Europe and the USA are operated with identical processes and impress with more than seven decades of technological leadership.

Our API Group I++ mineral oil-based base oils without a life cycle stand for infinite added value. Whether flux oil or fuel - all products that are created in addition to the CO₂-reduced oils have only one origin: used oil

We also have blending and filling capacities. Lubricants approved by automotive and machine manufacturers are traded for all applications from one litre to ship batches. Engine, hydraulic, gear and industrial oils are refined from our own base oil.





Who we are

AVISTA OIL is a pioneer in the upcycling of waste oil. We are well positioned to live the circular economy. We support our customers along their entire value chain: from the collection of oily wastes to their upcycling into high-quality base oils and all the way to closing the loop by producing state-of-the-art lubricants for a wide range of applications.

AVISTA OIL in numbers



1951 established in Dollber-



3 Re-Raffinerien



7 Entsorgungsgesellschaften



1.000 employees



>450.000 to collection capacity



>700.000 to recycling output



Up to 90 %
CO₂- savings

Our
business model:
An infinite
cycle

Our used oil collection



Used oil is our raw material for the production of our base oil. It is the source of our circular value creation.



Our collection vehicles are on the road throughout Germany, Europe and the USA.



We have a well-developed network with short travel distances to our refineries.

Our products



We produce our high quality base oil (KS®) with patented refining technology (ESR®).

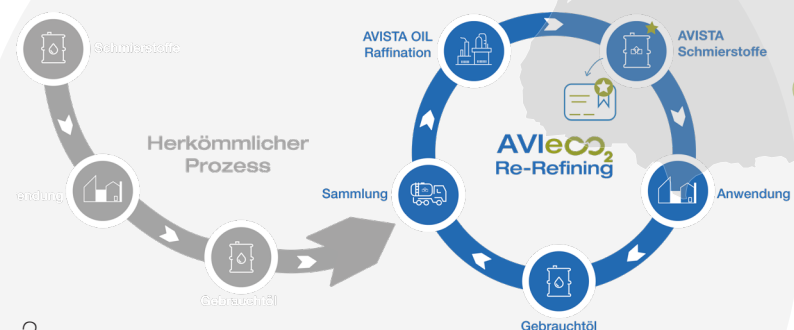


Our product portfolio comprises around 350 products - automotive lubricants and industrial oils in addition to base oils.



Our CO₂-savings are independently calculated and certified.

Our circular concept



GENERAL INFORMATION

AVISTA OIL Deutschland GmbH is certificated in accordance with the Ordinance on Specialised Waste Management Companies (EfbV). The exemption number is: FRC9802Z0007

Extract from the authorisation register for the acceptance of waste oils in accordance with waste oils, liquid waste in accordance with PCB/PCT waste ordinance and other liquid waste:

Recycling plant – disposal number: C1D000000

Authority	License typ	License number	Validity since
RP Lüneburg	GeWo	VG2(17)32-03 Nr. 12	17.08.1965
District government of Hannover	BlmSchG*	204-40211/27	21.08.1978
District government of Hannover	BlmSchG	504a-40500/4/4.4	11.07.1996
District government of Hannover	BlmSchG	501.7-40500/4/4.4	14.12.2001

Disposal procedures according to KrWG, Annex 1 and 2: R2, R9, D9

Interim waste storage - disposal number: C8K000000

Authority	License typ	License number	Validity since
District government of Hannover	Krw-/AbfG	502f-62811-S-3-3	13.04.1988
District government of Hannover	BlmSchG	204a-40500/4/4.4	24.08.1992
District government of Hannover	BlmSchG	504a-40500/4/4.4	06.02.1997

Disposal method according to KrWG, Annex 1 und 2: R12, D13

According to the German Waste Oil Ordinance and European regulations, the regeneration of waste oil to recover the base oil takes precedence over other disposal methods. The Waste Oil Ordinance groups waste oils into four collection categories: according to their recyclability.

We would like to point out explicitly that the Ordinance on Waste Oils prohibits to mix up waste oils which are suitable for regeneration (collection category 1) with waste oils of other collection categories. For waste oils of collection categories 2 to 4 in accordance with the Ordinance on Waste Oils which are delivered to AVISTA OIL Deutschland GmbH for processing, we confirm that they may be mixed as described below at the site where they accumulate received.

*Notes/ Remarks:

BlmSchG = Federal Immission Control Act

KrWG = Commercial and Industrial Waste Management Act

NachwV = Regulation for accountability

AltölV = Ordinance on Used Oil



Sustainable processing options of AVISTA OIL

Waste oils of collection category 1 according to the Waste Oil Ordinance are suitable for processing into base oil or flux oil depending on their quality and can be mixed with each other for use at AVISTA OIL Deutschland GmbH. Disposal number: C1D000000

AVISTA CATEGORY	LIMIT VALUES AVISTA		WASTE CODE NUMBER	DESCRIPTION OF WASTE MATERIAL
A/B¹	PCB [mg/kg] ²	max. 20	13 01 10	non-chlorinated mineral oil-based hydraulic oils
	Chlorine [Gew.%]	max. 0,2	13 02 05	non-chlorinated mineral oil-based machine, gear and lubricating oil
	Sediments [Vol.%]	max. 1	13 02 06	synthetic machine, gear and lubricating oils
	Flash point [°C]	>55	13 02 08	other machine, gear and lubricating oils
	Water [%] ³	<5	13 03 07 ⁴	non-chlorinated mineral oil-based insulating and heat transfer oils

¹The classification of used oil A or used oil B is based on the amount of ester content.

²Limit value PCB according to DIN EN 12766-1,2

³Higher water contents on request

⁴Do not mix with other insulating and heat transfer oils, especially silicone oils



Used oils of collection category 1 are not allowed to be mixed with waste oils of collection category 2, 3 or 4.



Depending on their quality, used oils in collection categories 2, 3 and 4 are suitable for processing into refinery products. Disposal number: C1D000000

AVISTA CATEGORY

C

LIMIT VALUES AVISTA

WASTE CODE NUMBER

DESCRIPTION OF WASTE MATERIAL

PCB [mg/kg] ¹	max. 20		
Chlor [Gew. %]	max. 0,2	12 01 07	Halogen-free mineral oil-based machining oils (except emulsions and solutions)
Sedimente [Vol. %]	max. 1	12 01 10	Synthetic machining oils
Flammpunkt [°C]	>55		
Wasser [%] ³	<5	13 01 11	Synthetic hydraulic oils
Wasser [%] ²	<5	13 01 13	Other hydraulic oils

PCB [mg/kg] ¹	max. 50	12 01 06	Mineral oil-based machining oils containing halogens (except emulsions and solutions)
Chlorine [Gew. %]	max. 1,0	13 01 01	Hydraulic oils containing PCBs with a PCB content of not more than 50 mg/kg
Sediments [Vol. %]	max. 1		
Flash point [°C]	>55	13 01 09	Chlorinated hydraulic oils based on mineral oil
Water [%] ²	<5	13 02 04	Chlorinated mineral oil-based machine, gear and lubricating oils
		13 03 01	Insulating and heat transfer oils containing PCBs with a PCB content of not more than 50 mg/kg
		13 03 06	Chlorinated mineral oil based insulating and heat transfer oils other than those mentioned in 13 03 01

PCB [mg/kg] ¹	max. 20	13 01 12	Readily biodegradable hydraulic oils
Chlorine [Gew. %]	max. 0,2	13 02 07	Easily biodegradable machine, gear and lubricating oils
Sediments [Vol. %]	max. 1		
Flasg point [°C]	>55	13 03 08	Synthetic insulating and heat transfer oils
Water [%] ²	<5	13 03 09	Readily biodegradable insulating and heat transfer oils
		13 03 10	Other insulating and heat transfer oils
		13 05 06	Oils from oil/water separators
		13 07 01	Heating oil and diesel

14 06 03 ³ Other solvents and solvent mixtures (petroleum)

¹Limit value PCB according to DIN EN 12766-1,2

²Higher water contents on request

³This waste code does not belong to collection categories 2-4, but AVISTA OIL Deutschland GmbH has a separate authorisation to recycle this waste together with the waste oils in collection categories 2-4.

However, this waste must be stored separately at the collection point.

CAT.2

CAT.3

CAT.4

AVISTA OIL also offers the option of collecting emulsions and oil-water mixtures, unmixed with each other and separated according to waste code. Disposal number: C1D000000

AVISTA CATEGORY E	LIMIT VALUES AVISTA		WASTE CODE NUMBER	DESCRIPTION OF WASTE MATERIAL
	PCB [mg/kg] ¹	max. 20	07 06 01	Aqueous washer fluids and mother liquors (e.g. windscreen wiper fluid)
	Chlorine [Gew. %]	max. 0,2	07 06 04	Other organic solvents, washing liquids and mother liquors
	Sediments [Vol. %]	max. 1	12 01 09	Halogen-free processing emulsions and solutions
	Flash point [°C]	>55	12 03 01	Aqueous washing liquids
	TOC [mg/l]	<10.000	12 03 02	Waste from vapour degreasing
	TNB [mg/l]	<1.000	13 01 05	Non-chlorinated emulsions
	Conductivity [µS/cm]	<10.000	13 04 01	Bilge oils from inland shipping
	pH-Value	5 -9	13 04 03	Bilge oils from other shipping
			13 05 07	Oily water from oil/water separators
			13 08 02	Other emulsions
			16 07 08	Waste containing oil (from the cleaning of transport and storage tanks and drum)

Brake fluids and antifreeze are recycled

Brake fluid - disposal number: C8K000000

LIMIT VALUES AVISTA	WASTE CODE NUMBER	DESCRIPTION OF WASTE MATERIAL
Density at 15 °C: 1.05 – 1.10 kg/l (according to DIN 51 757) Oil content (upper phase): max. 0.5 vol.% (according to MRD PA 043) pH value: 7 – 9 (according to DIN 38404-5) Water content: max. 5.0 wt.% (according to DIN 51 777-1) Electrical conductivity: max. 30 µS/cm (according to DIN EN 27888) Appearance: transparent, slight turbidity colour up to dark brown Collected by type for reprocessing	16 01 13	Brake fluids

Antifreeze - disposal number: C1D000000

LIMIT VALUES AVISTA	WASTE CODE NUMBER	DESCRIPTION OF WASTE MATERIAL
Density at 15°C: 1.04 - 1.10 kg/l according to DIN 51 757 Oil content (upper phase): max. 1.5 vol.% according to MRD PA 043 pH value: 7 - 9 according to DIN 38404-5 Water content: max. 70.0 wt.% according to DIN 51 777-1 Conductivity: max. 5,000 µS/cm according to DIN EN 27888 Appearance: transparent (slight turbidity only) Collected by type for reprocessing	16 01 14	Antifreeze

¹Limit value PCB according to DIN EN 12766-1,2

Brief overview according to waste codes

Waste code number	Description of waste material	Collection category	AVISTA Category
07 06 01	Aqueous washer fluids and mother liquors (e.g. windscreen wiper fluid)		E
07 06 04	Other organic solvents, washing liquids and mother liquors		E
12 01 06	Mineral oil-based machining oils containing halogens (except emulsions and solutions)	3	C
12 01 07	Halogen-free mineral oil-based machining oils (except emulsions and solutions)	2	C
12 01 09	Halogen-free processing emulsions and solutions		E
12 01 10	Synthetic machining oils	2	C
12 03 01	Aqueous washing liquids		E
12 03 02	Waste from vapour degreasing		E
13 01 01	Hydraulic oils containing PCBs with a PCB content of not more than 50 mg/kg	3	C
13 01 05	Non-chlorinated emulsions		E
13 01 09	Halogen-free processing emulsions and solutions	3	C
13 01 10	non-chlorinated mineral oil-based hydraulic oils	1	A/B
13 01 11	Synthetic hydraulic oils	2	C
13 01 12	Readily biodegradable hydraulic oils	4	C
13 01 13	Other hydraulic oils	2	C
13 02 04	Chlorinated mineral oil-based machine, gear and lubricating oils	3	C
13 02 05	non-chlorinated mineral oil-based machine, gear and lubricating oil	1	A/B
13 02 06	Synthetic machine, gear and lubricating oils	1	A/B
13 02 07	Easily biodegradable machine, gear and lubricating oils	4	C
13 02 08	other machine, gear and lubricating oils	1	A/B
13 03 01	Insulating and heat transfer oils containing PCBs with a PCB content of not more than 50 mg/kg	3	C
13 03 06	Chlorinated mineral oil based insulating and heat transfer oils other than those mentioned in 13 03 01	3	C
13 03 07	Easily biodegradable machine, gear and lubricating oils	1	A/B
13 03 08	Synthetic insulating and heat transfer oils	4	C
13 03 09	Readily biodegradable insulating and heat transfer oils	4	C
13 03 10	Other insulating and heat transfer oils	4	C
13 04 01	Bilge oils from inland shipping		E
13 04 03	Bilge oils from other shipping		E
13 05 06	Oils from oil/water separators	4	C
13 05 07	Oily water from oil/water separators		E
13 07 01	Heating oil and diesel	4	C
13 08 02	Other emulsions		E
14 06 03	Other solvents and solvent mixtures (petroleum)		C
16 01 03	Brake fluids		
16 01 14	Antifreeze		

CONTACT

AVISTA OIL Deutschland GmbH
Bahnhofstraße 82
D - 31311 Uetze

Tel. +49 (0) 5177 85-0
Fax +49 (0) 5177 85-226

info@avista-oil.de
www.avista-oil.de

