Safety Data Sheet
ATF-AW2 (Professional)(GB)

according to UK REACH (SI 2020/1577) as amended
Revision: 14/05/2025

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

1.1 Product identifier
Trade name: AW-2 (professional)
Registration number Mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against
Product category PC24 Lubricants, greases, release products
Application of the substance / the mixture Lubricant
Uses advised against The product is strictly intended for industrial or professional use only.

1.3 Details of the supplier of the safety data sheet
Supplier:
AISIN Europe S.A.
Avenue de l'Industrie 19 - 1420 Braine L'Alleud - Belgium
Tel. : +32 387 01 10

AISIN Europe Aftermarket - www.aisinaftermarket.eu
Tel: +32 2 387 01 36 - am.contact@aisin-europe.com

1.4 Emergency telephone number
Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to GB-CLP
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

2.2 Label elements
Labelling according to GB-CLP The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms

GHS08

Signal word Danger.
Hazard statements H304 May be fatal if swallowed and enters airways.

Precautionary statements	P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P331 Do NOT induce vomiting P405 Store locked up. P501 Dispose of contents/container in accordance with local regulations
Additional information	EUH208 Contains 1,1'-(iminobis(ethyleneiminoethylene))bis(3-(octadecenyl)pyrrolidine-2,5-dione). May produce an allergic reaction

2.3 Other hazards

Results of PBT and vPvB assessment

PBT	Not applicable.
vPvB	Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: A blend of highly refined mineral oils, synthetic base oils and multifunctional additives.

Dangerous components		
CAS: 74869-22-0 EINECS: 278-012-2 Index number: 649-484-00-0	Lubricating oils Asp. Tox. 1, H304 Note: L	50 – 100%
CAS: 1041187-44-3 ELINCS: 424-820-7 Reg.nr.: 01-0000017126-75-XXXX	Reaction product of alkylthioalcohol and substituted phosphorus compound Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Chronic 1, H410 (M=10); Acute Tox. 4, H302; Acute Tox. 4, H312	0,1 – < 0,25%
CAS: 64051-50-9 EINECS: 264-637-8 Reg.nr.: (Confidential)	1,1'-(iminobis(ethyleneiminoethylene))bis(3-(octadecenyl) pyrrolidine-2,5-dione) Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1B, H317; Aquatic Chronic 3, H412	0,1 – < 1%

Additional information: CAS: 1041187-44-3 (shown above) is part of a tested "Alkyl phosphites mixture".
Acute and chronic aquatic testing done on the "Alkyl phosphites mixture" results in a classification of Acute Aquatic 3, which takes precedence over the calculated classification, according to GHS.
The classification of the product is then calculated using the classification (Acute Aquatic 3) and wt% of the "Alkyl phosphites mixture", plus the classification and wt% of any other substances with an aquatic classification.
Mineral oil contains <3% DMSO extract as measured by IP346.
For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information	Immediately remove any clothing soiled by the product.
After inhalation	Supply fresh air; consult doctor in case of complaints.
After skin contact	Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor
After eye contact	Check for and remove any contact lenses. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing	Wash mouth out with water Do not induce vomiting; call for medical help immediately. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
Information for doctor	If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately. Treat symptomatically and supportively

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO_2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions

For safety reasons unsuitable extinguishing agents:
Water with full jet

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Phosphorous oxides
Sulphur Oxides (SOx)

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Particular danger of slipping on leaked/spilled product.
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:
Do not allow to penetrate the ground/soil.
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.

6.3 Methods and material for containment and cleaning up:
Contain and collect spillage with non-combustible, absorbent material e.g.sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

6.4 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Information about fire - and explosion protection:
No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Storage — Requirements to be met by storerooms and receptacles:
Prevent any seepage into the ground.
Information about storage in one common storage facility:
Store away from oxidising agents.
Further information about storage conditions:
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
Storage class: 10

7.3 Specific end use(s)
No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs		
CAS: 1041187-44-3 Reaction product of alkylthioalcohol and substituted phosphorus compound		
Oral	Long-term systemic effects	250 µg/kg bw/day (general population)
Dermal	Long-term systemic effects	250 µg/kg bw/day (general population) 500 µg/kg bw/day (worker)
Inhalative	Long-term systemic effects Long-term systemic effects	1,76 mg/m^3 (worker) 430 µg/m^3 (general population)
CAS: 64051-50-9 1,1'-(iminobis(ethyleneiminoethylene))bis(3-(octadecenyl)pyrrolidine-2,5-dione)		
Dermal	Long-term systemic effects	6,7 mg/kg bw/day (worker)
Inhalative	Long-term systemic effects	12 mg/m^3 (worker)

PNECs	
CAS: 1041187-44-3 Reaction product of alkylthioalcohol and substituted phosphorus compound	
Freshwater	900 ng/L
Freshwater - Intermittent releases	900 ng/L
Marine water	90 ng/L
Sewage Treatment Plant	5 mg/L
Sediment (freshwater)	730 µg/kg
Sediment (marine water)	73 µg/kg
Soil	86 µg/kg
Secondary poisoning	10 mg/kg food
CAS: 64051-50-9 1,1'-(iminobis(ethyleneiminoethylene))bis(3-(octadecenyl)pyrrolidine-2,5-dione)	
Freshwater	47,6 µg/L
Freshwater - Intermittent releases	476 µg/L
Marine water	4,76 µg/L
Marine water - Intermittent releases	47,6 µg/L
Sewage Treatment Plant	32 mg/L
Sediment (freshwater)	883.000 mg/kg
Sediment (marine water)	88.300 mg/kg
Secondary poisoning	66,7 mg/kg food
Soil	177 g/kg soil

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

8.2 Exposure controls

Appropriate engineering controls: No further data; see section 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals.
Avoid contact with the eyes and skin.
Keep away from foodstuffs, beverages and feed.
Do not eat or drink while working.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not carry product impregnated cleaning cloths.

Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.
Filter A for organic vapours

Hand protection

Protective gloves.
Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves: Nitrile rubber, NBR
Neoprene gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material: Break-through time: > 480 minutes
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection:

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Body protection:

Protective work clothing
Body protection must be chosen depending on product properties, activity and possible exposure.

Environmental exposure controls: Do not allow to enter drains, sewers or watercourses.
Risk management measures: The operators shall be instructed adequately

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information	
Physical state	Liquid
Colour	Red
Odour	Slight
Odour threshold	Not determined.
Melting point/freezing point	≤ -45 °C (Pour Point)
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not applicable.
Lower and upper explosion limit	
Lower	1 Vol %
Upper	7 Vol %
Flash point	175 – 220 °C
Auto-ignition temperature	200 – 410 °C
Decomposition temperature	Not determined.
pH	Not determined.
Viscosity	
Kinematic viscosity at 40 °C	< 20,5 mm^2/s
Dynamic	Not determined.
Solubility	
Water	Not miscible or difficult to mix.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure	Not determined.
Density and/or relative density	
Density at 20 °C	0,822 g/cm^3
Relative density	Not determined.
Vapour density	Not determined.

9.2 Other information

Appearance	
Form	Liquid

Important information on protection of health and environment, and on safety.

Ignition temperature	Product is not self-igniting.
Explosive properties	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Solvent content	
VOC (EC)	0,00 %
Change in condition	
Evaporation rate	Not determined.

Information with regard to physical hazard classes

Explosives	Not applicable
Flammable gases	Not applicable
Aerosols	Not applicable
Oxidising gases	Not applicable
Gases under pressure	Not applicable
Flammable liquids	Not applicable

Flammable solids	Not applicable
Self-reactive substances and mixtures	Not applicable
Pyrophoric liquids	Not applicable
Pyrophoric solids	Not applicable
Self-heating substances and mixtures	Not applicable
Substances and mixtures, which emit flammable gases in contact with water	Not applicable
Oxidising liquids	Not applicable
Oxidising solids	Not applicable
Organic peroxides	Not applicable oid
Corrosive to metals	Not applicable
Desensitised explosives	Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity
No further relevant information available.

10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
Heat and static discharge.

10.5 Incompatible materials:
Strong acids.
Strong bases.
Strong oxidising agents.

10.6 Hazardous decomposition products:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Phosphorus oxides (e.g. P2O5)
Sulphur oxides (SOx)

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification		
CAS: 1041187-44-3 Reaction product of alkylthioalcohol and substituted phosphorus compound		
Oral	LD50	2.000 mg/kg (rat)
Dermal	LD50	500 mg/kg (rabbit)
CAS: 64051-50-9 1,1'-(iminobis(ethyleneiminoethylene))bis(3-(octadecenyl)pyrrolidine-2,5-dione)		
Oral	LD50	2.000 mg/kg (rat)
Dermal	LD50	2.000 mg/kg (rat)

Primary irritant effect:

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	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	May be fatal if swallowed and enters airways.
Subacute to chronic toxicity	Prolonged or repeated skin contact may irritate and cause dermatitis.
Additional toxicological information	Repeated or prolonged skin contact may induce sensitisation.

11.2 Information on other hazards

Endocrine disrupting properties None of the ingredients are listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity	
CAS: 64051-50-9 1,1'-(iminobis(ethyleneiminoethylene))bis(3-(octadecenyl)pyrrolidine-2,5-dione)	
EC50 (48 h)	73,4 mg/l (aquatic invertebrates)
EC50 (72 h)	48,9 – 100 mg/l (aquatic algae and cyanobacteria) 100 mg/l (algae)
EC50 (3 h)	320 mg/L (microorganisms)

12.2 Persistence and degradability

Not easily biodegradable

12.3 Bioaccumulative potential

Contains components with the potential to bioaccumulate.

12.4 Mobility in soil
No further relevant information available.

12.5 Results of PBT and vPvB assessment
PBT Not applicable.
vPvB Not applicable.

12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects
Remark: Harmful to fish
Additional ecological information:
General notes: Harmful to aquatic organisms
Water hazard class 3 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
Recommended Hierarchy of Controls Minimise waste;
Reuse if not contaminated;
Recycle, if possible; or
Safe disposal (if all else fails).
Must not be disposed together with household garbage.
Do not allow product to reach sewage system.
Contact waste processors for recycling information.
Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.
Delivery of waste oil to offically authorised collectors only.

UK List of Waste	
13 00 00	OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19)
13 02 00	waste engine, gear and lubricating oils
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils

Uncleaned packaging:
Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
Disposal must be made according to official regulations.
Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.
Recommended cleansing agents Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN number or ID number
ADR/RID/ADN, IMDG, IATA Not applicable

14.2 UN proper shipping name
ADR/RID/ADN, ADN, IMDG, IATA Not applicable

14.3 Transport hazard class(es)
ADR/RID/ADN, ADN, IMDG, IATA
Class Not applicable

14.4 Packing group
ADR/RID/ADN, IMDG, IATA Not applicable

14.5 Environmental hazards Not applicable.

14.6 Special precautions for user Not applicable.

14.7 Maritime transport in bulk according to IMO instruments Not applicable
UN «Model Regulation» Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Poisons Act
Regulated explosives precursors: None of the ingredients are listed
Regulated poisons: None of the ingredients are listed
Regulated explosives precursors: None of the ingredients are listed
Regulated poisons: None of the ingredients are listed
Control Of Major Accident Hazards Regulations 2015 (COMAH)
Named dangerous substances - ANNEX I: None of the ingredients are listed

15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out.

SECTION 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. This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

Relevant phrases
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Training hints
This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

Department issuing SDS: Product safety department.
Abbreviations and acronyms:
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (UK REACH)
PNEC: Predicted No-Effect Concentration (UK REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1B
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

*Data compared to the previous version altered.

Typical Properties of AW-2

		AW-2(JAPAN)
Density@15°C	g/cm3	0.822
Color	ASTM	RED
Viscosity @40°C	mm2/S	11.8
Viscosity @100°C	mm2/S	3.2
Viscosity Index		145
Flash Point(COC)	°C	190
Pour Point	°C	-45
BF Viscosity (-40°C)	Pa・s	1.2
Acid Number	mgKOH/g	1.11
Base Number (HCl)	mgKOH/g	1.78
Elemental Analysis		
B	mass%	0.004
S	mass%	0.10
P	mass%	0.03
Si	mass%	0.0011