



Safety Data Sheet

ATF-AW1

according to Regulation (EC) No 1907/2006
Article 31

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

1.1 Product identifier

Trade name: AW-1 (US)

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 Any use not specified above.

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

Tel: 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified, according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

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 with multifunctional additives.

Dangerous components		
CAS: 72623-86-0 EINECS: 276-737-9 Reg.nr.: 01-2119474878-16-XXXX	Lubricating oils (petroleum), C15-30, hydrotreated neutral oilbased	50 – 100%
	⚠ Asp. Tox. 1, H304 Note: L	
CAS: 64051-50-9 EINECS: 264-637-8 Reg.nr.: (Confidential)	1,1'-(iminobis(ethyleneiminoethylene)) bis(3-(octadecenyl) pyrrolidine-2,5-dione)	0,1 – < 1%
	⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1B, H317; Aquatic Chronic 3, H412	
ELINCS: 424-820-7 Reg.nr.: 01-0000017126-75-XXXX	Alkyl phosphites	0,25 – < 1%
	⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Aquatic Chronic 1, H410 (M=10); ⚠ Acute Tox. 4, H312	

Additional information:

The substance "Alkyl phosphites" (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: CO₂, 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 (CO)

Nitrogen oxides (NO_x)

Phosphorous oxides

Sulphur Oxides (SO_x)

Hydrocarbons

In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

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.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately.

It must not enter the sewage system.



SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Particular danger of slipping on leaked/spilled product.

Wear protective equipment. Keep unprotected persons away.

Keep ignition sources away — no smoking.

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:

Do not heat up to temperatures close to flash point.

Keep ignition sources away - Do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Storage Requirements to be met by storerooms and receptacles:

Prevent any seepage into the ground.

Store only in the original receptacle.

Information about storage in one common storage facility:

Do not store together with acids.

Do not store together with alkalis (caustic solutions).

Store away from oxidising agents.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Store in a bunded area.

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: 72623-86-0 Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based		
Oral	Long-term systemic effects	740 µg/kg bw/day (general population)
Dermal	Long-term systemic effects	970 µg/kg bw/day (worker)
Inhalative	Long-term systemic effects	2,73 mg/m ³ (worker)
		1,19 mg/m ³ (general population)
	Long-term local effects	5,58 mg/m ³ (worker)
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: 72623-86-0 Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	
Secondary poisoning	9,33 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.

Keep away from foodstuffs, beverages and feed.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Do not eat, drink, smoke or sniff 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 in trouser pockets.
Respiratory protection: Use suitable respiratory
protective device in case of insufficient ventilation.
Filter A/P2

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.

Material of gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Nitrile rubber, **NBR**

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

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state	Fluid
Colour	Red
Odour	Slight
Odour threshold	Not determined.
Melting point/freezing point	≤ -42 °C
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 °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	0,85 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) 0,07 %

Change in condition

Evaporation rate Not determined.

Information with regard to physical hazard classes

Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void

Substances and mixtures, which emit flammable gases in contact with water

	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void



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.

Halogens

10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Hydrocarbons

Nitrogen oxides (NO_x)

Phosphorus oxides (e.g. P₂O₅)

Sulphur oxides (SO_x)

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: 72623-86-0 Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based		
Oral	LD50	> 5.000 mg/kg (rat)
Dermal	LD50	> 2.000 mg/kg (rat)
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

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

Subacute to chronic toxicity

Prolonged or repeated skin

contact may irritate and cause dermatitis.

Additional toxicological information

May cause sensitisation in susceptible persons. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause brochopneumonia or pulmonary oedema.

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: 72623-86-0 Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	
EC50 (96 h)	> 100 mg/l (Bacteria)
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

Additional ecological information:

General notes:

Water hazard class 2 (German Regulation) (Self-assessment):
hazardous for water
Do not allow product to reach ground water,
water course or sewage system.
Danger to drinking water if even 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 officially authorised collectors only.

Uncleaned packaging:

Recommendation:

Empty contaminated packaging 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

Transport/Additional information Not dangerous according to the above specifications.

UN «Model Regulation» Not applicable



Typical Properties of AW-1 (US)

		AW-1(US)
Density@15°C	g/cm ³	0.854
Color	ASTM	RED
Viscosity @40°C	mm ² /S	25.7
Viscosity @100°C	mm ² /S	5.6
Viscosity Index		169
Flash Point(COC)	°C	194
Pour Point	°C	-45
BF Viscosity (-40°C)	Pa · s	7.7
Acid Number	mgKOH/g	1.38
Base Number (HCl)	mgKOH/g	1.96
Elemental Analysis		
B	mass%	0.005
S	mass%	0.12
P	mass%	0.03
Si	mass%	0.0007



SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I

None of the ingredients are listed.

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients are listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients are listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients are listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients are listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

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.

Department issuing SDS: Product safety department.

Date of previous version: 08.10.2024

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 (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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.**