



Safety Data Sheet

SDS No. LD4335/50201
Issue Date: December 15, 2023

Revision No. 01
Revision Date: October 27, 2025

AISIN Orange EXTENDED LIFE PREDILUTED ANTIFREEZE/COOLANT 50/50

SECTION 1: IDENTIFICATION

1.1 Product identifier

Product: AISIN Orange
EXTENDED LIFE PREDILUTED ANTIFREEZE/COOLANT 50/50

Synonyms: None

Product Part Number: ACD-005

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

Coolant/Antifreeze

1.3 Safety data sheet supplier

Manufacturer Name: AISIN Aftermarket & Service of America
Address: 19801 Vermont Ave, Torrance, CA 90502 U.S.A.
Telephone: 1-800-822-2726

1.4 Emergency telephone number

CHEMTREC: +1-800-424-9300 - DOMESTIC
+1-202-4X83-7616 - INTERNATIONAL

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Health Hazard Classification:

Hazard	Category	Code
Acute Toxicity - Oral	4	H302
Reproductive Toxicity	2	H361
Specific Target Organ Toxicity (Repeated Exposure)	2	H373

Physical Hazard Classification:

Not classified

2.2 Label elements

Hazard Pictograms



GHS07



GHS08

Signal word: **Warning**

Hazard statements

H302 Harmful if swallowed
H361 Suspected of damaging fertility or the unborn child
H373 May cause damage to kidneys through prolonged or repeated exposure

Precautionary statements

Prevention

P264 Wash face, hands and any exposed skin thoroughly after handling.



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- P270 Do not eat, drink or smoke when using this product.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves and eye protection.
P260 Do not breathe mist, vapours or spray.

Response

- P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330 Rinse mouth.
P308 + P313 IF exposed or concerned: Get medical advice or attention.

Storage

- P405 Store locked up.

Disposal

- P501 Dispose of contents or container in accordance with local, regional, national and international regulations.

2.3 Other hazards

None known

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

3.2 Mixtures

<u>Components</u>	<u>CAS No.</u>	<u>Nominal wt%</u>
Ethylene glycol	107-21-1	45~55%
Methyl-1H-benzotriazole	29385-43-1	0.1~0.3%
Water	7732-18-5	45~55%

Proprietary items on this safety data sheet are designated as trade secrets. Requests for disclosure of trade secret information will be made in accordance with the provisions contained in OSHA 29 CFR 1910.1200(i).

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Swallowing:

If victim is conscious and able to swallow, quickly have victim drink water or milk to dilute. Do NOT give sodium bicarbonate, fruit juices or vinegar. NEVER give anything by mouth if victim is unconscious or having convulsions. Induce vomiting only if advised by physician or Poison Center. CALL PHYSICIAN OR POISON CENTER IMMEDIATELY.

Skin Contact:

Immediately flush skin with plenty of water while removing contaminated clothing.

Eye Contact:

Immediately flush eyes with plenty of cool water for several minutes. Do NOT permit victim to rub eyes. Seek medical attention if irritation persists.

Inhalation:

Immediately remove victim to fresh air. If victim has stopped breathing give artificial respiration. GET MEDICAL ATTENTION IMMEDIATELY.



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4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in sections 2.2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Individuals should perform only those firefighting procedures for which they have been trained. Use water spray, dry chemical, foam or carbon dioxide. Use water to keep fire-exposed containers cool. If a spill or leak has not ignited, use water spray to disperse the vapors. Water spray may be used to flush spills away from fire and diluted spills to noncombustible proportions. See warnings on water spray on hot glycol below.

5.2 Special hazards arising from the substance or mixture

This product is not classified as flammable or combustible. Keep away from open flames.

5.3 Advice for firefighters

Water spray may cause foaming of hot glycol. Apply water spray indirectly or use other extinguishing media such as dry chemical, carbon dioxide or alcohol-resistant foam.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For personal protection, see section 8. In case of spills, beware of slippery floors and surfaces.

6.2 Environmental precautions

The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

6.3 Method and material for containment cleaning up

Contain any spills and absorb the fluid using inert material. Do not allow the fluid to drain in sewage. Dispose in accordance with national and local laws and regulations.

6.4 Reference to other sections

For disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions and safe handling

- Do not expose children and pets to this material.
- After handling product, wash thoroughly with soap and water before drinking, eating or smoking.
- Keep away from open flames.

7.2 Conditions for safe storage, including any incompatibilities

To prevent possible storage container rupture, do not permit to freeze. Incompatible with oxidizers, strong acids and bases, chromium trioxide, potassium permanganate and sodium peroxide.

7.3 Specific end uses

The identified uses for this product are detailed in section 1.2.



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SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters

Component	CAS No.	Source	Exposure Limit	Notes
Ethylene glycol	107-21-1	OSHA PEL (Permissible Exposure Limit)	None	None
		ACGIH TLV (Threshold Limit Values)	25 ppm	Vapor fraction TWA (Time-weighted average)
			50 ppm	Vapor fraction STEL (Short-term exposure limit)
			10 mg/m ³	STEL for aerosols only
		AIHA and OARS WEEL (Workplace Environmental Exposure Limit)	1 mg/m ³	None
Methyl-1H-benzotriazole	29385-43-1	OSHA	None	None
		ACGIH		
		AIHA and OARS		

OSHA: Occupational Safety and Health Administration (U.S.A.)

ACGIH: American Conference of Governmental Industrial Hygienists (U.S.A.)

AIHA: American Industrial Hygiene Association (U.S.A.)

OARS: Occupational Alliance of Risk Science (U.S.A.)

8.2 Exposure controls

Control measures:

Handle in the presence of adequate ventilation. Engineering controls should be used whenever feasible to maintain concentrations below acceptable exposure criteria, including enclosures and local exhaust ventilation.

Respiratory protection:

Where exposure is likely to exceed acceptable criteria and engineering controls are not feasible, use NIOSH-approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminants in air and in accordance with OSHA (29 CFR 1910.134)

Protective clothing:

Wear chemical resistant gloves, such as nitrile, and protective clothing which are impervious to the product for the duration of exposure if there is potential for skin contact. Consult your safety equipment supplier.

Eye protection:

Wear safety glasses meeting the specifications of ANSI Standard Z87.1 where no contact with the eye is anticipated. Chemical safety goggles meeting the specification of ANSI Standard Z87.1 should be worn whenever there is the possibility of splashing or other contact with the eyes.



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information of basic physical and chemical properties

Item	Value/Range
Appearance	Clear, slightly viscous orange liquid
Odor	No characteristic odor
Odor threshold	Data not available
pH (Original solution)	7.5~9.0
Freezing point	Lower than -37°C (-34°F)
Initial boiling point	Greater than 108°C (226°F)
Flash point	None
Evaporation rate	Data not available
Flammability (solid, gas)	Data not available
Upper and lower flammability or explosive limits	Data not available
Vapor pressure	Data not available
Vapor density (Air = 1)	Data not available
Density (20°C)	1.06~1.10 g/cm ³
Solubility in water	Infinite miscibility
Partition coefficient <i>n</i> -octanol/water	Data not available
Autoignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	Data not available

9.2 Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Hazardous polymerization:

Not likely to occur

Conditions and materials to avoid:

Avoid oxidizing agents, strong acids and bases. Do not expose to open flame.

10.2 Chemical stability

Generally stable

10.3 Possibility of hazardous reactions

Data not available

10.4 Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5 Incompatible materials

Oxidizing agents, strong acids and bases

10.6 Hazardous decomposition products

If pyrolyzed, thermal decomposition products of residue may include carbon (C), carbon monoxide (CO), carbon dioxide (CO₂), water (H₂O), ammonia (NH₃), organic vapors and nitrogen-containing organic compounds.



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SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Inhalation:

Breathing excessive levels of the vapour or mist can irritate the respiratory tract. Excessive vapour concentrations of the major component, ethylene glycol, might be generated during heating of this material and have occasionally been reported to cause adverse effects on the blood-forming system and the nervous system.

Ingestion:

The acute oral toxicities of the main components of this mixture are as follows:

Ethylene glycol:

ATE: 500 mg/kg

The lowest dose reported to produce death in humans was estimated to be 1,560 mg/kg body weight. For a person weighing 150 pounds, this would be equivalent to drinking about *3 fluid ounces* of pure ethylene glycol in a short period of time.

Methyl-1H-benzotriazole:

ATE: 500 mg/kg

ATE: *Acute Toxicity Estimate*

Eye contact:

Based on this mixture's constituents, the mist or liquid can be expected to cause mild to moderate irritation or inflammation of the eyes.

Skin contact:

The acute dermal LD₅₀ of the major component of this product, ethylene glycol, is 10,600 mg/kg (rabbits). Based on the pH and the irritation potential of this mixture's constituents, the mist or liquid can be expected to cause mild to moderate irritation of the skin.

LD₅₀: *Lethal dose* for 50% of the population

Chronic effects:

Ethylene glycol is known to cause kidney damage.

Methyl-1H-benzotriazole is known to cause adverse effects on reproduction.

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

IARC: *International Agency for Research on Cancer* (UN)

NTP: *National Toxicology Program* (U.S.A.)



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SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Ecological information of the main ingredients of the product:

Ethylene glycol:

LC ₅₀ : Pimephales promelas (Fathead minnow)	53,000 mg/L (96 hrs)
EC ₅₀ : Daphnia magna (Water flea)	> 100 mg/L (48 hrs)
NOEC: Raphidocelis subcapitata (Microalga)	> 100 mg/L (72 hrs)
NOEC: Ceriodaphnia dubia (Water flea)	8,590 mg/L (7 d)

Methyl-1H-benzotriazole:

LC₅₀: Cyprinodon variegatus (Sheepshead minnow) 55 mg/L (96 hrs)

LC₅₀: *Lethal concentration* for 50% of organisms in surrounding environment

EC₅₀: *Effective concentration* that induces a biological response in 50% of surrounding organisms

NOEC: *No Observed Effect Concentration*

12.2 Persistence and degradability

Ethylene glycol is readily biodegradable.

12.3 Bioaccumulative potential

Bioconcentration potential is low.

Bioaccumulation log K_{ow} :

Ethylene glycol: -1.36

Methyl-1H-benzotriazole: 0~2

log K_{ow}/log P_{ow}: Logarithm of the *n*-octanol/water partition ratio or coefficient.

12.4 Mobility in soil

The product is miscible with water. May spread in water systems.

12.5 Results of PBT and vPvB assessment

The components of this product are not classified as PBT or vPvB.

PBT: *Persistent, bioaccumulative and toxic* substances

vPvB: *Very persistent and very bioaccumulative* substances

12.6 Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:

Disposal should be made in accordance with applicable federal, state and local regulations. All recovered material should be packaged, labeled, transported, and disposed of or reclaimed in conformance with good engineering practices. Avoid land filling of liquids. Reclaim where possible.



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SECTION 14: TRANSPORT INFORMATION

14.1-14.5	UN Number	Shipping Name	Class	Packaging Group	Environmental
DOT - U.S. Domestic Destinations	3082	Environmentally Hazardous Substance Liquid, n.o.s. (ethylene glycol)	9	III	This substance is not regulated when shipped in packages below the <i>RQ</i> . <i>RQ</i> only if over 1,013 gallons. Ethylene glycol (<i>predilute</i>) for this product has RQ of 9,090 lbs.
DOT - International Destinations					
IATA	Not applicable				
IMDG	Not applicable				

RQ: Reportable quantity

DOT: Department of Transportation regulations (U.S.A.)

IATA: International Air Transport Association Dangerous Goods Regulations

IMDG: International Maritime Dangerous Goods code

14.6 Special precautions for user

None known

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable. Product shipped in package form only.

SECTION 15: REGULATORY INFORMATION

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

Toxic Substance Control Act:

This product is a mixture and therefore is not listed in the TSCA Inventory of Chemical Substances. All of the components of the mixture are listed in or exempt from the TSCA Inventory of Chemical Substances.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

The following are subject to reporting under Title III: The Emergency Planning and Community Right-to-Know Act.

Hazard categories (SARA Sections 311 & 312 and 40 CFR Part 370):

Reference section 2 for OSHA hazard classifications.

Toxic chemical release (SARA Section 313 and 40 CFR Part 372):

This product contains greater than 45wt% ethylene glycol (CAS No. 107-21-1).

California Proposition 65:



WARNING: This product can expose you to chemicals such as **ethylene glycol** which is known in the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov/product.



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Bittering Agent:

This product contains bittering agent.

SECTION 16: OTHER INFORMATION

NFPA Rating:

Health (1) Fire (0) Reactivity (0)

NFPA: *National Fire Protection Association* (U.S.A.)

Date of revision: October 27, 2025

Preparation of safety data sheet:

This document has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and WHMIS 2015.

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