

1. Product and Company Identification

Product Code: ACT002
Product Name: ACT-002
Company Name: AISIN World Corp. of America
 24330 Garnier Street
 Torrance, CA 90505
Phone Number: +1 (310)326-8681
Emergency Contact: CHEMTREC +1 (800)424-9300
Product Category: Coolant

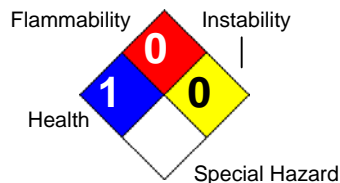
2. Hazards Identification

Acute Toxicity: Oral, Category 4
Skin Corrosion/Irritation, Category 2



GHS Signal Word: **Warning**
GHS Hazard Phrases: H302 - Harmful if swallowed. H315 - Causes skin irritation.
GHS Precaution Phrases: P264 - Wash hands thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P362+364 - Take off contaminated clothing and wash it before reuse.
GHS Response Phrases: P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P315 - Get immediate medical advice/attention.
 P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P315 - Get immediate medical advice/attention.
 P302+352 - IF ON SKIN: Wash with plenty of soap and water. P332+313 - If skin irritation occurs, get medical advice/attention.
 P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313 - If eye irritation persists, get medical advice/attention.
 P321 - Specific treatment see Section 4 reference to supplemental first aid instruction - if immediate measures are required.
GHS Storage and Disposal Phrases: P501 - Dispose of contents/containers in accordance with local/regional/national/international regulations.

Hazard Rating System:



Potential Health Effects (Acute and Chronic): Effects may be delayed.
Inhalation: Material has a very low vapor pressure at room temperature, so inhalation exposures are not expected unless material is heated or misted. Repeated excessive exposure to ethylene glycol may cause irritation of the upper respiratory tract.
Skin Contact: Low hazard for normal industrial handling. A single prolonged skin exposure is not likely to result in the material being absorbed in harmful amounts. Prolonged or repeated skin contact may cause dermatitis.
Eye Contact: May cause moderate eye irritation. Causes redness and tearing. Prolonged or repeated

eye contact may cause conjunctivitis.

Ingestion:

Harmful if swallowed. The lethal dose in adult humans for ethylene glycol is about 100 ml (1/3 cup). Swallowing may cause nausea, vomiting or diarrhea. May cause severe and permanent damage to the digestive tract. May cause systemic effects.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
107-21-1	Ethylene glycol	<50.0 %
1310-58-3	Potassium hydroxide	< 5.0 %

4. First Aid Measures

Emergency and First Aid

Procedures:

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Get medical aid.

In Case of Inhalation:

In Case of Skin Contact:

In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical aid if irritation develops and persists.

In Case of Eye Contact:

Do NOT allow victim to rub eyes or keep eyes closed. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid if irritation develops and persists.

In Case of Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Note to Physician:

Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flash Pt:

NA

Explosive Limits:

LEL: No data.

UEL: No data.

Autoignition Pt:

NA

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Fire Fighting Instructions:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Flammable Properties and Hazards:

Extinguish all nearby sources of ignition.

6. Accidental Release Measures

Protective Precautions, Protective Equipment and Emergency Procedures:

Use proper personal protective equipment as indicated in Section 8.

Environmental Precautions:

Do not let product enter drains, sewers, watersheds or water systems.

Steps To Be Taken In Case Material Is Released Or Spilled:

Use proper personal protective equipment as indicated in Section 8. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

7. Handling and Storage

Precautions To Be Taken in Handling:	Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.
Precautions To Be Taken in Storing:	Store in a cool, dry, well-ventilated area away from incompatible substances. Avoid contact with strong acids. Store away from heat. Store away from sparks, flames. Store in a tightly closed container. Protect containers against damage. Keep container closed when not in use.
Other Precautions:	Handle in accordance with good industrial hygiene and safety practices. Keep out of reach of children.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
107-21-1	Ethylene glycol	No data.	CEIL: 100 mg/m3 (H)	No data.
1310-58-3	Potassium hydroxide	No data.	CEIL: 2 mg/m3	No data.
Respiratory Equipment (Specify Type):	No special respiratory protection equipment is required with adequate ventilation.			
Eye Protection:	Safety glasses with side shields.			
Protective Gloves:	Wear appropriate protective gloves to prevent skin exposure.			
Other Protective Clothing:	Wear appropriate protective clothing to prevent skin exposure.			
Engineering Controls (Ventilation etc.):	Facilities storing or utilizing this material should be equipped with an eyewash facility, and a safety shower is recommended.			

9. Physical and Chemical Properties

Physical States:	[] Gas [X] Liquid [] Solid		
Appearance and Odor:	Appearance: Clear. Pink. Liquid. No precipitates. Odor: None reported.		
Melting Point:	No data.		
Boiling Point:	> 212.00 F (100.0 C) / 760 mm Hg.		
Decomposition Temperature:	NA		
Autoignition Pt:	NA		
Flash Pt:	NA		
Explosive Limits:	LEL: No data.	UEL: No data.	
Specific Gravity (Water = 1):	1.079		
Density:	NA		
Bulk density:	NA		
Vapor Pressure (vs. Air or mm Hg):	NA		
Vapor Density (vs. Air = 1):	NA		
Evaporation Rate:	NA		
Solubility in Water:	Complete		
Saturated Vapor Concentration:	NA		
Viscosity:	NA		
pH:	7.7		
Percent Volatile:	NA		

VOC / Volume: NA
Particle Size: NA
Heat Value: NA
Corrosion Rate: NA

10. Stability and Reactivity

Reactivity: High temperatures and fires may produce toxic carbon monoxide and carbon dioxide.
Stability: Unstable [] Stable [X]
Conditions To Avoid - Instability: Excess heat, ignition sources.
Incompatibility - Materials To Avoid: Strong acids, Acid vapors.
Hazardous Decomposition Or Byproducts: High temperatures and fires may produce toxic carbon monoxide carbon dioxide.
Possibility of Hazardous Reactions: Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions: No data available.

11. Toxicological Information

Toxicological Information: Epidemiology: No information available.
 Teratogenicity: No information available.
 Reproductive Effects: No data available.
 Mutagenicity: No information available.
 Neurotoxicity: No information available.
 Other Studies: Ingredient CAS# 107-21-1:
 Acute toxicity, LD50, Oral, Rat, 4700 mg/kg

 Other Studies: Ingredient CAS# 1310-58-3:
 Acute toxicity, LD50, Oral, Rat, 273 mg/kg
Irritation or Corrosion: Other Studies: Ingredient CAS# 107-21-1:
 Standard Draize Test, Eyes, Species:Rabbit, 500 mg, 24H

 Other Studies: Ingredient CAS# 1310-58-3:
 Standard Draize Test, Skin, Species:Rabbit, 50.0 mg, 24H
Carcinogenicity/Other Information: CAS# 107-21-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
 CAS# 1310-58-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological Information: Environmental: No information found.
 Physical: No information found.
Results of PBT and vPvB assessment: Other Studies: Ingredient CAS# 107-21-1:
 LC50, Water flea (Daphnia magna), 10000 mg/L, 24H, Intoxication
 LC50, Goldfish (Carassius auratus), 5000000 ug/L, 24H, Mortality

 Other Studies: Ingredient CAS# 1310-58-3:
 LC50, Western Mosquitofish (Gambusia affinis), adult(s), 80000 ug/L, 96H, Mortality

13. Disposal Considerations

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

14. Transport Information

GHS Classification: Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed
Skin Corrosion/Irritation, Category 2 - Warning! Causes skin irritation

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

DOT Hazard Class:

UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
107-21-1	Ethylene glycol	No	Yes 5000 LB	Yes
1310-58-3	Potassium hydroxide	No	Yes 1000 LB	No

CAS # Hazardous Components (Chemical Name)

Other US EPA or State Lists

107-21-1	Ethylene glycol	CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Inventory, 4 Test; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: No; MI CMR, Part 5: Part 5; NC TAP: Yes; NJ EHS: Yes - 0878; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: Yes; WI Air: Yes
1310-58-3	Potassium hydroxide	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NC TAP: No; NJ EHS: Yes - 1571; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: No; WI Air: Yes

CAS # Hazardous Components (Chemical Name)

International Regulatory Lists

107-21-1	Ethylene glycol	Canadian DSL: Yes; Canadian NDSL: No
1310-58-3	Potassium hydroxide	Canadian DSL: Yes; Canadian NDSL: No

16. Other Information

Revision Date: 10/12/2013

Additional Information About This Product: No data available.

This Product:

Company Policy or Disclaimer: While Aisin World Corp. of America believes the statements set forth herein are accurate as of the date hereof, Aisin World Corp. of America makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation, and verification.