

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code:	AISIN-002-BULK	
Product Name:	ACB-003	
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

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 5
Serious Eye Damage/Eye Irritation, Category 2A
Aquatic Toxicity (Acute), Category 3
Toxic To Reproduction, Category 1A
Specific Target Organ Toxicity (single exposure), Category 1
Specific Target Organ Toxicity (repeated exposure), Category 1



GHS Signal Word: **Danger**

GHS Hazard Phrases: H303 - May be harmful if swallowed.
H319 - Causes serious eye irritation.
H360 - May damage fertility or the unborn child .
H370 - Causes damage to organs
H372 - Causes damage to organs through prolonged or repeated exposure.
H402 - Harmful to aquatic life.

GHS Precaution Phrases: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection.
P281 - Use personal protective equipment as required.

GHS Response Phrases: P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with plenty of water for 15 minutes.
P315 - Get immediate medical advice/attention.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342 - If experiencing respiratory symptoms: P315 - Get immediate 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.
P315 - Get immediate medical advice/attention.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P315 - Get immediate medical advice/attention.

GHS Storage and Disposal Phrases: P405 - Store locked up.
P501 - Dispose of contents/container in accordance to local, state and federal regulations.

**Potential Health Effects
(Acute and Chronic):**

Repeated excessive exposure to ethylene glycol may cause irritation of the upper respiratory tract. In humans, effects have been reported on the central nervous system, including nystagmus (involuntary, rapid, rhythmic movement of the eyeball).

Inhalation:

If ethylene glycol is heated or misted in work areas that are poorly ventilated, vapor/mist may accumulate and cause respiratory irritation and symptoms such as headache and nausea. Material has a very low vapor pressure at room temperature, so inhalation exposures are not expected unless material is heated or misted.

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.

Eye Contact:

May cause moderate eye irritation.

Ingestion:

The lethal dose in adult humans for ethylene glycol is about 100 ml (1/3 cup). Swallowing may cause nausea, vomiting or diarrhea. Excessive exposure may cause CNS effects, cardiopulmonary effects (metabolic acidosis), and kidney failure. Toxicity follows 3-stage progression. (1) involves central nervous system effects including paralysis of eye muscles, convulsions, and coma. Metabolic acidosis and cerebral swelling may also occur. (2) involves cardiopulmonary system with symptoms of hypertension, rapid heart beat, and possible cardiac failure. (3) involves severe kidney abnormalities including possible renal failure.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
107-21-1	Ethylene glycol	<50 %
1310-58-3	Potassium hydroxide	<5.0 %

4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

In Case of Inhalation:

If inhaled, remove to fresh air. Get medical aid immediately.

In Case of Skin Contact:

In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse.

In Case of Eye Contact:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical aid.

In Case of Ingestion:

Never give anything by mouth to an unconscious person. If victim is conscious and alert, give 2-4 cupfuls of water. Get medical attention immediately.

Note to Physician:

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

5. FIRE FIGHTING MEASURES

Flash Pt:	110 C	Method Used:	Closed Cup
Explosive Limits:	LEL: No data.	UEL:	No data.
Autoignition Pt:	No data.		
Suitable Extinguishing Media:	Use dry sand or earth to smother fire. Use extinguishing media appropriate to surrounding fire conditions.		
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:	No data available.		
	No data available.		

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures:	Use proper personal protective equipment as indicated in Section 8.
Environmental Precautions:	Avoid release to the environment. Do not let product enter drains, sewers, watersheds or water systems.
Steps To Be Taken In Case Material Is Released Or Spilled:	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid breathing spray or mist. Avoid extremely high temperature. Do not ingest or inhale.
Precautions To Be Taken in Storing:	Store in a cool, dry, well-ventilated area away from incompatible substances.

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	PEL: 2.0 mg/m3	CEIL: 2 mg/m3	No data.
Respiratory Equipment (Specify Type):	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.			
Eye Protection:	Wear chemical splash goggles.			
Protective Gloves:	Wear appropriate protective gloves to prevent skin exposure. Rubber or neoprene gloves.			
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.			
Work/Hygienic/Maintenance Practices:	Handle in accordance with good industrial hygiene and safety practice.			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [] Gas [X] Liquid [] Solid
Appearance and Odor: Blue.
pH: 7.3 - 8.3
Melting Point: No data.
Boiling Point: No data.
Flash Pt: 110 C Method Used: Closed Cup
Evaporation Rate: No data.
Flammability (solid, gas): Flammable in the presence of a source of ignition when the temperature is above the flash point.
Explosive Limits: LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or mm Hg): No data.
Vapor Density (vs. Air = 1): No data.
Specific Gravity (Water = 1): No data.
Density: 1.126 - 1.130
Solubility in Water: No data.
Percent Volatile: No data.
Autoignition Pt: No data.

10. STABILITY AND REACTIVITY

Stability: Unstable [] Stable [X]
Conditions To Avoid - Instability: Avoid extremely high temperature.
Incompatibility - Materials To Avoid: Strong oxidizing agents, Strong acids.
Hazardous Decomposition or Byproducts: Carbon monoxide, oxides of potassium.
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 found. Teratogenicity: No information available. Reproductive Effects: No information found. Mutagenicity: No information found. Neurotoxicity: No information found.
Irritation or Corrosion:	Other Studies: CAS# 107-21-1: Acute toxicity, LD50, Oral, Rat, 4700 mg/kg Other Studies: CAS# 107-21-1: Standard Draize Test, Eyes, Species: Rabbit, 100 mg, 1H Other Studies: CAS# 1310-58-3: Acute toxicity, LD50, Oral, Rat, 273 mg/kg Other Studies: CAS# 1310-58-3: Standard Draize Test, Skin, Species: Rabbit, 50.0 mg, 24H
Carcinogenicity/Other Information:	ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. 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.
Carcinogenicity:	NTP? No IARC Monographs? No OSHA Regulated? No

12. ECOLOGICAL INFORMATION

General Ecological Information:	Environmental: No information available. Physical: No information available.
Results of PBT and vPvB assessment:	Other Studies: CAS# 1310-58-3: LC50, Western Mosquitofish (<i>Gambusia affinis</i>), adult(s), 80000 ug/L, 96H, Mortality
Persistence and Degradability:	No data available.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.

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. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

DOT Hazard Class:

UN/NA Number:

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: Yes - 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: Yes - 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)

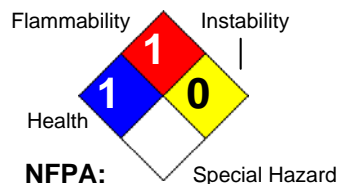
International Regulatory Lists

107-21-1	Ethylene glycol	Canadian DSL: Yes; Canadian NDSL: No; China IECSC: Yes; Japan ENCS: Yes - (2)-230; Japan ISHL: No; Korea ECL: Yes - KE-13169; REACH: Yes - (R), (P)
1310-58-3	Potassium hydroxide	Canadian DSL: Yes; Canadian NDSL: No; China IECSC: Yes; Japan ENCS: Yes - (1)-369; Japan ISHL: No; Korea ECL: Yes - KE-29139; REACH: Yes - (R), (P)

16. OTHER INFORMATION

Revision Date: 06/03/2015

Hazard Rating System:



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

SAFETY DATA SHEET
ACB-003

thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation, and verification.