

1. Product and Company Identification

Product Code:	112A	
Product Name:	Twin-Chem AGR	
Company Name:	TWIN-CHEMICALS, INC. 6175 Hickory Flat Highway Suite 110-344 Canton, GA 30115	Phone Number: (800)442-4958
Web site address:	www.twinchemicals.com	
Email address:	sales@twinchemicals.com	
Emergency Contact:	CERTS (Health & Environment only)	(800)552-3787
Information:	Sales& information	(800)442-4958

2. Hazards Identification

Acute Toxicity: Oral, Category 4
Acute Toxicity: Skin, Category 4
Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2A
Acute Toxicity: Inhalation, Category 4



GHS Signal Word:	Warning
GHS Hazard Phrases:	H302 - Harmful if swallowed. H312 - Harmful in contact with skin. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H320 - Causes eye irritation. H332 - Harmful if inhaled. H401 - Toxic to aquatic life. H411 - Toxic to aquatic life with long lasting effects.
GHS Precaution Phrases:	P261 - Avoid breathing dust/fume/gas/mist/vapors/spray. P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves & eye protection.
GHS Response Phrases:	P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P302+352 - IF ON SKIN: Wash with plenty of soap and water. P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or physician for treatment advice. Have product container or label with you when calling poison control center or physician. P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P330 - Rinse mouth. P332+313 - If skin irritation occurs, get medical advice/attention. P337+313 - If eye irritation persists, get medical advice/attention. P362 - Take off contaminated clothing and wash before re-use.

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P363 - Wash contaminated clothing before reuse.

P391 - Collect spillage.

GHS Storage and Disposal Phrases:

P501 - Dispose of contents/container to waste facility according to Federal and local regulations.

P405 - Store locked up.

P403+235 - Store in cool/well-ventilated place.

Potential Health Effects (Acute and Chronic):

Chronic: May cause liver and kidney damage. Sophisticated modeling has clearly proven that 2-butoxyethanol does not build up in the body under any kinds of normal use.

Inhalation:

Material is irritating to mucous membranes and upper respiratory tract. Harmful if inhaled. May cause respiratory tract irritation. May cause narcotic effects in high concentration. May cause lung damage.

Skin Contact:

Causes skin irritation. Substance is rapidly absorbed through the skin. Causes symptoms similar to those of inhalation. Skin sensitization testing with human volunteers produced negative results. A skin notation is not recommended by ACGIH, based on estimates from physiologically based pharmacokinetic models which indicate that, even in worst-case dermal-exposure scenarios, 2-butoxyethanol is not absorbed in amounts sufficient to cause red blood cell hemolysis in humans.

Eye Contact:

Causes severe eye irritation. Causes redness and pain.

Ingestion:

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals. Harmful if swallowed. May cause irritation of the digestive tract. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
68919-53-9	Fatty acids, soya, Me esters	80.0 -90.0 %
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate}	5.0 -15.0 %
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	5.0 -10.0 %

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation:

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Get medical aid immediately. Remove from exposure and move to fresh air immediately.

In Case of Skin Contact:

In case of contact, immediately wash skin with soap and copious amounts of water. Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

In Case of Eye Contact:

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

In Case of Ingestion:

If swallowed, wash out mouth with water provided person is conscious. Call a physician. Get medical aid immediately. Call a poison control center.

Signs and Symptoms Of Exposure:

Exposure can cause: Nausea, headache, and vomiting. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Note to Physician:

None known.

5. Fire Fighting Measures

Flash Pt: > 75.00 C Method Used: Estimate
Explosive Limits: LEL: N.E. UEL: N.E.
Autoignition Pt: NA
Suitable Extinguishing Media: Suitable: Use water spray, dry chemical, carbon dioxide, or chemical foam.
Fire Fighting Instructions: Specific Hazard(s): As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire. Combustible liquid and vapor.

Flammable Properties and

Hazards:

Hazardous Combustion

Products:

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: PROCEDURE(S) OF PERSONAL PRECAUTION(S)
 Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.
 Methods for cleaning up.
 Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete. Use proper personal protective equipment as indicated in Section 8.
 Spills/Leaks: Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment.

7. Handling and Storage

Precautions To Be Taken in Handling: User Exposure: Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Use spark-proof tools and explosion proof equipment. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood.

Precautions To Be Taken in Storing: Suitable: Keep away from sources of ignition. Store in a cool, dry place.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
68919-53-9	Fatty acids, soya, Me esters			
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate}			
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	PEL: 50 ppm	TLV: 20 ppm	

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Respiratory Equipment (Specify Type):	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. Hand: Compatible chemical-resistant gloves. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.
Eye Protection:	Chemical safety goggles. Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
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.):	Mechanical exhaust required. Safety shower and eye bath. Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.
Work/Hygienic/Maintenance Practices:	Wash thoroughly after handling.

9. Physical and Chemical Properties

Physical States:	<input type="checkbox"/> Gas <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Solid
Appearance and Odor:	Clear liquid. ester-like.
pH:	NA
Freezing Point:	
Boiling Point:	> 120.00 C
Flash Pt:	> 75.00 C Method Used: Estimate
Evaporation Rate:	< 1 (H ₂ O=1)
Flammability (solid, gas):	Combustible material: may burn but does not ignite readily.
Explosive Limits:	LEL: N.E. UEL: N.E.
Vapor Pressure (vs. Air or mm Hg):	Low
Vapor Density (vs. Air = 1):	NA
Specific Gravity (Water = 1):	0.94 - 0.95 at 20.0 C
Solubility in Water:	Emulsifies
Octanol/Water Partition Coefficient:	
Percent Volatile:	> 85.0 % by weight.
Autoignition Pt:	NA
Decomposition Temperature:	NA
Viscosity:	Slight

10. Stability and Reactivity

Stability:	Unstable <input type="checkbox"/> Stable <input checked="" type="checkbox"/>
Conditions To Avoid - Instability:	Incompatible materials, ignition sources.
Incompatibility - Materials To Avoid:	Strong acids. Strong bases, Aluminum.
Hazardous Decomposition or Byproducts:	Carbon monoxide.
Possibility of Hazardous Reactions:	Will occur <input type="checkbox"/> Will not occur <input checked="" type="checkbox"/>

**Conditions To Avoid -
Hazardous Reactions:****11. Toxicological Information**

Toxicological Information: Epidemiology: No information found.
Teratogenicity: No information available. Reproductive Effects: Mutagenicity:
Neurotoxicity:

Carcinogenicity/Other Information: CAS# 111-76-2: ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans.
California: Not listed.
NTP: Not listed.
IARC: Not listed.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
68919-53-9	Fatty acids, soya, Me esters	n.a.	n.a.	n.a.	n.a.
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate}	n.a.	n.a.	n.a.	n.a.
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	n.a.	3	A3	n.a.

12. Ecological Information

General Ecological Information: ELIMINATION.
Environmental: TERRESTRIAL FATE: Based on a recommended classification scheme, an estimated Koc value of 67,, determined from an experimental log Kow and a recommended regression-derived equation, indicates that ethylene glycol mono-n-butyl ether is expected to have high mobility in soil. An estimated BCF value of 2.5 was calculated for ethylene glycol mono-n-butyl ether, using an experimental log Kow of 0.83 and a recommended regression-derived equation. According to a recommended classification scheme, this BCF value suggests that bioconcentration in aquatic organisms is low.
Physical: No information found.
Other: An estimated BCF value of 2.5,, from an experimental log Kow, suggests that ethylene glycol mono-n-butyl ether bioconcentration in aquatic organisms will be low, according to a recommended classification scheme.

13. Disposal Considerations

Waste Disposal Method: Empty container may be recycled or disposed of as solid sanitary waste. Do not reuse container. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. 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.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

14. Transport Information

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Supersedes Revision: 06/12/2015**LAND TRANSPORT (US DOT):****DOT Proper Shipping Name:** NOT REGULATED FOR DOMESTIC TRANSPORT. Combustible liquid, n.o.s.**DOT Hazard Class:****UN/NA Number:** NA1993**Packing Group:** III**LAND TRANSPORT (Canadian TDG):****TDG Shipping Name:** Environmentally hazardous substance, liquid, n.o.s
(applies to single containers of more than 119 gallons -
smaller containers are not regulated)**AIR TRANSPORT (ICAO/IATA):****ICAO/IATA Shipping Name:** Non-Hazardous for Air Transport: Non-hazardous for air transport.

15. Regulatory Information

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

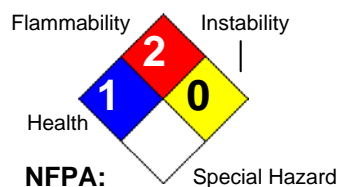
CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
68919-53-9	Fatty acids, soya, Me esters	No	No	No
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate}	No	No	No
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	No	No	Yes-Cat. N230

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
68919-53-9	Fatty acids, soya, Me esters	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 8A PAIR; CA PROP.65: No
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

16. Other Information

Revision Date: 10/19/2015**Hazard Rating System:**

HEALTH	1
FLAMMABILITY	2
PHYSICAL	0
PPE	B

**HMIS:****Additional Information About
This Product:****Company Policy or
Disclaimer:**

THE INFORMATION CONTAINED HEREIN is based upon available information at the time of preparation and is believed to be accurate but is not warranted to be so. Users are advised to confirm in advance of need that the information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or any other user proximately caused by the material if misused or if reasonable safety procedures are not adhered to as stipulated in the data sheet and on the product label. Furthermore, vendor assumes no responsibility for injury or damage caused by abnormal use of this material even if reasonable safety measures are followed.