



Washington State Department of Agriculture
Pesticide Management Division
1111 Washington Street SE, 2nd Floor
P.O. Box 42589 • Olympia, WA 98504-2589
Telephone: (360) 902-2030 • FAX: (360) 902-2093
E-mail pestreg@agr.wa.gov • Web site <http://agr.wa.gov>

SPRAY ADJUVANT REGISTRATION IN WASHINGTON

WSDA has developed this guidance for registrants of spray adjuvant products in order to clarify Washington registration and labeling requirements. Failure to submit a complete application will delay the registration process. Here are some of the most common problems noted during review of adjuvant registrations, and suggestions to avoid them.

- 1. Incomplete registration package.** WSDA requires submission of an application for registration of pesticides ([AGR 630-4216](#)), a supplemental information form ([AGR 630-4119](#)), 2 copies of the product label, 1 copy of the Spray Adjuvant CSF ([AGR 630-4325](#)) and the application fee. In addition, WSDA requires submission of an addendum form ([AGR 630-4250](#)) if you are registering more than 4 new products. Spray adjuvant registration information and forms are available on the WSDA web site at <http://agr.wa.gov>.
- 2. Inadequate confidential statement of formula (CSF).** WSDA requires a CSF for all adjuvants registered in Washington. The CSF must be submitted on the WSDA Spray Adjuvant Confidential Statement of Formula form ([AGR 630-4325](#)). The common chemical name and Chemical Abstracts Service (CAS) number are required for all ingredients. In addition, the chemical name listed in 40 CFR 180 and the specific citation are required for all ingredients if the product is labeled for food or feed use. 40 CFR 180 is available on the Government Printing Office web site at <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=%2Findex.tpl>. Please refer to example CSF.
- 3.** WSDA will consider registration of adjuvants with ingredients that are not listed in 40 CFR 180 if the products are labeled for non-food and non-feed uses only (e.g. forestry, non-cropland, ornamental, right-of-way, turf). Please refer to example CSF.
- 4. Incorrect function statement.** Adjuvant function terminology must be consistent with ASTM International (ASTM) Standard E 1519 and E 609. Information on obtaining ASTM standards is available on the ASTM web site at www.astm.org. Please refer to example label.
- 5. Incorrect ingredients statement.** The three primary principal functioning agents must be listed on the label, and the label must include an accurate percentage statement. Please refer to example CSF and label.
- 6. Incorrect signal word and/or precautionary statements.** The signal word and precautionary statements (including personal protective equipment and first aid, when applicable) are based on mammal acute toxicity data (oral, dermal, inhalation, eye irritation and skin irritation). WSDA recommends using EPA Health Effects Test Guidelines for acute toxicity testing (OPPTS 870.1100, 870.1200, 870.1300, 870.2400, and 870.2500) to determine product toxicity. Test guidelines are available on the EPA web site at www.epa.gov/opptsfrs/home/guidelin.htm. The EPA Label Review Manual should be used as guidance for label precautionary statements, and is available on the EPA web site at www.epa.gov/oppfead1/labeling/lrm. Refer to EPA PR Notice 2001-1 for guidance on First Aid Statements. EPA PR Notices are available on the EPA web site at www.epa.gov/PR_Notices. If mammal acute toxicity studies have not been conducted on the product, submit information for the product components. Please refer to example supplemental information form and label.
- 7. Labeled for aquatic use without aquatic toxicity data.** If the adjuvant is labeled for aquatic use, aquatic toxicity studies are required for fish and aquatic invertebrates. The preferred fish species is rainbow trout (*Oncorhynchus mykiss*). WSDA requires using EPA Ecological Effects Test Guidelines for fish acute toxicity testing (OPPTS 850.1075) and aquatic invertebrate acute toxicity testing (OPPTS 850.1010). WSDA criteria for aquatic use are available on the WSDA web site at <http://agr.wa.gov/PestFert/definitions/DefinitionCriteriaRegistrationSprayAdjuvantsAquatic.pdf>. Test guidelines are available on the EPA web site at www.epa.gov/opptsfrs/home/guidelin.htm. If there are no aquatic toxicity data for the adjuvant, the label must prohibit aquatic use. Please refer to example supplemental information form and label.

The following are fictional examples of a completed WSDA Spray Adjuvant Confidential Statement of Formula, a completed Supplemental Information Form, and a spray adjuvant label that complies with WSDA requirements. WSDA labeling requirements for spray adjuvants (WAC 16-228-1400(3)) are found in the General Pesticide Rules. The rules are available on the WSDA web site at <http://agr.wa.gov>.



SPRAY ADJUVANT CONFIDENTIAL STATEMENT OF FORMULA

Name of Registrant: XYZ Chemical Company

Product Name: XYZ Adjuvant

Common Chemical Name	CAS Number	Chemical Name and 40 CFR 180 (food use only)	Name of Supplier	Spray Adjuvant Function(s) Performed	Nominal Percentage
Nonylphenol ethoxylate	9016-45-9	a-(p-nonylphenyl)-(O)-hydroxy poly (oxyethylene). 40CFR 910 & 920	ABC Chemical Company www.aabchem.com	Nonionic surfactant	79.5 %
Phosphoric Acid	7664-38-2	Phosphoric acid, 40CFR 180.910	Mica Corporation	Acidifier	10 %
Dimethyl/poly siloxane	63148-62-9	Dimethyl/poly siloxane, 40CFR 180.960	ABC Chemical Company www.aabchem.com	Antifoaming agent	.5 %
Total Percentage of PFA:					90 %

Constituents Ineffective as Spray Adjuvants (CIASA)

Common Chemical Name	CAS Number	Chemical Name and 40 CFR 180 (food use only)	Name of Supplier	Purpose in Formulation	Nominal Percentage
water	7732-18-5	not applicable	City of Middletown	Diluent	10 %
					%
					%
Total Percentage of CIASA:					10 %

Total Percentage of All Ingredients (Must Equal 100%): 100 %

Print Name and Title:

Dr. John Smith, Manager

Signature:

Dr. John Smith

Date:

12/31/08



SUPPLEMENTAL INFORMATION FOR SPRAY ADJUVANT REGISTRATION

(BEFORE YOU COMPLETE THIS FORM, PLEASE REFER TO INSTRUCTIONS ON REVERSE)

Spray Adjuvant Brand Name: XYZ Spray Adjuvant		Registrant: XYZ Chemical Company
Spray adjuvant function(s) claimed: nonionic surfactant, acidifier, antifoaming agent		
Have efficacy studies been conducted? Yes	Are all ingredients exempt from tolerance under 40 CFR 180? (food use only) Yes	Have mammal toxicity studies been conducted? Yes If yes, list values below.
Have phytotoxicity studies been conducted? No	Have aquatic toxicity studies been conducted? No If yes, list values below.	Have biodegradation studies been conducted? No
Mammal Acute Toxicity Data:		
Oral LD ₅₀ (mg/kg) ¹ : >5,000 Species: rat	Dermal LD ₅₀ (mg/kg) ¹ : .5,000 Species: rat	Inhalation LC ₅₀ (mg/l) ¹ : .2 Species: rat
Eye irritation (category) ¹ : 2 Species: rabbit	Skin irritation (category) ¹ : 3 Species: rabbit	Dermal sensitization: Unknown Species: N/A
Signal word: warning	PPE required: eye protection, gloves	
Aquatic Acute Toxicity Data:		
Fish LC ₅₀ (mg/l) ² : Unknown Species: n/a	Fish NOEC (mg/l) ² : Unknown Species: n/a	
Invertebrate EC ₅₀ (mg/l) ³ : Unknown Species: n/a	Invertebrate NOEC (mg/l) ³ : Unknown Species: n/a	
Citations for studies referenced above [author(s), title, journal & page numbers (if applicable), date]:		
Efficacy - Dr. John Smithe (XYZ Chemical Company), Spray Adjuvant Research Trials 1998-1999		
Toxicity - Dr. Elizabeth H Jonez (ABC Testing Laboratory), Acute Toxicity of XYZ Spray Adjuvant, June 15, 1998		
<h1>EXAMPLE</h1>		
Print Name: Dr. John Smithe	Title: Manager, Product Development	
Signature: <i>Dr. John Smithe</i>	Date:	12/31/08

¹ Value (mg/kg or mg/l) or category, species (e.g. rat or rabbit) and time period (e.g. 24-hr).
² Value (mg/l), species and time period (e.g. 96-hr). Rainbow trout (*Oncorhynchus mykiss*) is preferred.
³ Value (mg/l), species and time period (e.g. 48-hr). *Daphnia magna* or *Daphnia pulex* are preferred.

XYZ SPRAY ADJUVANT

Nonionic Surfactant, Acidifier and Antifoaming Agent

Principal Functioning Agents:

Alkylphenol ethoxylate, phosphoric acid, dimethylpolysiloxane	90%
Constituents Ineffective as Spray Adjuvants	10%
Total	100%

All ingredients are exempt from the requirements of a tolerance under 40 CFR 180.

WA Reg. No. 00000-08001

Net Contents: 2.5 Gallons

KEEP OUT OF REACH OF CHILDREN

WARNING

Causes substantial but temporary eye injury. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

First Aid – If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Personal Protective Equipment (PPE) – Applicators and other handlers must wear: long-sleeved shirt and long pants, shoes plus socks, chemical-resistant gloves and protective eyewear (goggles or face shield).

DIRECTIONS FOR USE

XYZ Spray Adjuvant is a proprietary product that functions as a wetter, spreader and acidifier. It also contains an antifoaming agent to help prevent foam formation during mixing and loading. XYZ Spray Adjuvant is intended for use with pesticides that are labeled for agricultural, forestry, non-cropland, ornamental, right-of-way and turf uses. Not for aquatic use.

Recommended Use Rates:

Nonionic Surfactant - Use 2 to 4 pints per 100 gallons. Some pesticide labels recommend a higher or lower surfactant use rate for optimum efficacy. Follow the pesticide label directions when this occurs.

Acidifier - Use 1 to 2 pints per 100 gallons. The use rate may need to be adjusted, depending on the initial pH of the water and the desired final pH. Use of a pH measuring device is recommended.

Do not exceed 5.0% v/v concentration.

Environmental Hazards:

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

Storage and Disposal:

Store in original container only. Do not contaminate water, food, or feed by storage or disposal. Do not reuse empty container. Triple rinse (or equivalent) during mixing and loading. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at www.acrecycle.org. Decontaminated containers may also be disposed of in a sanitary landfill.

Manufactured by:

XYZ Chemical Company
20039 97th St.
Middletown, USA