



COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA COMMERCIAL ITEM DESCRIPTION (PCID)

PCID NO. 1084
Eff. 12/15/2014

Adjuvants

(Supercedes PCID 1084 eff. 1/4/2013)

This Pennsylvania Commercial Item Description covers requirements for various adjuvants to be used with pesticides. Product shall conform to the following requirements unless otherwise noted on the request for proposals or invitation for bids.

1.0 Classification – The adjuvants shall be of the following types and classes meeting the requirements specified herein.

Type 1- Drift Control Adjuvants Type 2 - Surfactant Adjuvants Type 3 – Spray Oil Adjuvants
 Type 4 - De-Foaming Adjuvants Type 5 - Polymeric Pattern Marker

2.0 Requirements - The products shall be clean, uniform and free from any defects, which might impair their utility.

2.1 Type 1- Drift Control Adjuvants

2.1.1 Class 1 – Acrylic acid copolymer: The spray additive shall have 30% minimum principal functioning agent as acrylamide/acrylic acid copolymer and remainder inert ingredients.

2.1.2 Class 2 – Polyvinyl polymer (polyacrylamide): The spray additive shall have 30% principal functioning agent as polyvinyl polymer (polyacrylamide) and 70% inert ingredients.

2.1.3 Class 3 – Polyacrylamide Polymer (Polysaccharide Polymer): The dry flowable additive shall have 27% polyacrylamide polymer, 3% polysaccharide polymer functioning agent and 70% inert ingredients.

2.1.4 Class 4 - Polyvinyl polymer (polyacrylamide): The spray additive shall have 37% principal functioning agent as polyvinyl polymer (polyacrylamide) and 63% inert ingredients.

2.2 Type 2 - Surfactant Adjuvants

2.2.1 Class 1 – Alkylaryl polyoxyethylene (low foam): The low foam nonionic surfactant shall have a minimum of 90% principal functioning agents as alkylaryl polyoxyethylene, glycols, free fatty acids and isopropanol, and a maximum of 10% inert ingredient (water). This product must be labeled for aquatic use.

2.2.2 Class 2 – Poly-l-p-Menthene: The non-ionic surfactant shall have 96% principal functioning agent as Poly-l-p-Menthene and 4% inert ingredients.

2.3 Type 3 – Spray Oil Adjuvants

2.3.1 Class 1 - Aliphatic-based oil/nonionic emulsifiers/citrus scented: The spray oil adjuvant shall have 83% principal functioning agent as aliphatic- and cyclic-based natural and petroleum products, and 17% principal functioning agent as non-ionic blended emulsifiers (containing citrus-scented masking agent).

2.3.2 Class 2 - Citrus oil extract with emulsifiers: The spray oil adjuvant shall be a biodegradable, low viscosity, natural terpene oil, and shall have 100% principal functioning agent as d-limonene and emulsifiers. The spray oil shall not contain petroleum derivatives.

2.3.3 Class 3 - Aliphatic-based oil/nonionic emulsifiers/pine scented: The spray oil adjuvant shall have 83% principal functioning agent as aliphatic- and cyclic-based natural and petroleum products, and 17% principal functioning agent as non-ionic blended emulsifiers (containing pine-scented masking agent).

2.3.4 Class 4 - Pine oil extract with emulsifiers: The spray oil adjuvant shall be a biodegradeable, low viscosity, natural terpene oil, and shall have 100% principal functioning agents as d,l-limonene and related isomers and emulsifiers. The spray oil shall not contain petroleum derivatives.

2.3.5 Class 5 - Aliphatic-based oil/surfactants: The spray oil adjuvant shall have 83% principal functioning agent as refined paraffinic oil, phyto bland, and MINIMUM 16% principal functioning agent as non-ionic blended surfactants and emulsifiers, and/OR 1% inert ingredients.

2.3.6 Class 6 - Paraffinic oil/emulsifiers/surfactants: The spray oil adjuvant/carrier concentrate shall consist of 97.35% phyto bland, paraffinic oil blend and 2.65% emulsifiers and surfactants as principal functioning agents capable of creating a thin invert emulsion for the Thinvert Application System.

2.3.7 Class 7 - Oil Penetrant and Low Volume Basal Oil: Shall consist of 100% aliphatic hydrocarbon oil as principal functioning agent.

2.4 Type 4 - De-Foaming Adjuvants

2.4.1 Class 1 – Dry: The defoaming adjuvant shall contain a minimum of 10% active ingredient as polydimethylsiloxane and a maximum of 90% inert ingredients.

2.4.2 Class 2 – Liquid: The defoaming adjuvant shall contain a minimum of 10% active ingredient as polydimethylsiloxane and a maximum of 90% inert ingredients.

2.5 Type 5 - Polymeric Pattern Marker

2.5.1 Class 1 - The polymeric pattern marker shall be 100% polymeric colorant and shall not contain any dye or ink. This product must be labeled for industrial and highway use, as a spray pattern indicator.

3.0 Sampling, Inspection and Testing - Sampling for prior to/post-award testing, if required, will be as defined in the Invitation to Bid Proposal. Inspection may be made at place of manufacture at the option of the Commonwealth after an award has been made. Inspection for final acceptance shall be made at the place of delivery and/or after laboratory testing to determine whether product or service meets the specification requirements. Samples for inspection and after-delivery testing shall be selected by simple random sampling. If defects are detected during the course of delivery, or after product has been delivered, the Commonwealth reserves the right to reject the defective product and require replacement at no cost to the Commonwealth, or cancel the contract and surcharge the contractor for any expense incurred by the cancellation of the contract and in securing satisfactory materials, if the vendor fails to apply timely and corrective measures. When necessary, tests shall be made in accordance with the applicable test methods as described in the current edition of the Official Methods of Analysis of the Association of Official Analytical Chemists (A.O.A.C.). (Consideration may be given to the manufacturer's standard test methods.)

4.0 Packaging -Unless otherwise specified, formulations shall be packaged in new containers according to manufacturer's standard commercial practice. Cans shall be of a nature to resist corrosion from the time of delivery to a minimum of twelve (12) months in storage. Liquid and flowable formulations shall be packaged in new, unused, non-returnable, corrosion resistant cans, drums, pails or product-compatible plastics, in the sizes as specified. Wettable powders and granular formulations shall be packaged in sift-proof, odor-proof, bags, sacks, or fiber drums, in the sizes as specified. Shipping containers shall be standard commercial containers acceptable by all common carriers.

5.0 Marking - Each container shall have a current label, which includes directions for its use. Statements of liquid measure shall be in terms of the United States gallon @ 68 ° F. Each shipping container shall be clearly marked with the name of contents, the amount contained, the batch or lot number, the contract or order number or numbers, and the name of the receiving party as shown on the face of the contract or order.

6.0 Material Masters – This PCID encompasses requirements for the following material masters:

SAP Material No.	Description	SAP Material No.	Description
301476	Drift Control Additive Type 1, Class 3 Ref: 41A	312013	Oil Penetrant and Low Volume Basal Oil Type 3, Class 7 Ref: Hy-Grade 1 Mineral Oil
312009	Surfactant Low Foam for Aquatic Use Type 2, Class 1 Ref: Chemsurf 90	301477	De-Foaming Adjuvant Type 4, Class 1 Ref: Dry Defoamer
312010	Spray Oil Adjuvant Pine Oil Extract Type 3, Class 4 Ref: Cide Kick II	312012	Polymeric Pattern Marker Type 5, Class 1 Ref: Bullseye No Substitution
312011	Spray Oil Adjuvant Unscented Type 3, Class 5 Ref: Clean Cut	322637	Drift Control Additive Type 1, Class 4 Ref: Garco Control

7.0 Documents Sources –

Association of Analytical Chemists
481 North Frederick Avenue
Suite 500
Gaithersburg, MD 20877-2417

Quality Assurance Supervisor
Brian Vulgaris

Director, Quality Assurance
Janice Pistor