

Safety Data Sheet

ASANA XL Insecticide

1. IDENTIFICATION: CHEMICAL PRODUCT AND COMPANY

PRODUCT NAME:ASANA XL InsecticideEPA REGISTRATION NUMBER:59639-209SYNONYM(S):DPX-YB656PRODUCT DESCRIPTION:Insecticide

MANUFACTURER/DISTRIBUTOR VALENT U.S.A. CORPORATION P.O. Box 8025 1600 Riviera Avenue, Suite 200 Walnut Creek, CA 94596-8025 EMERGENCY TELEPHONE NUMBERS HEALTH EMERGENCY OR SPILL (24 hr): (800) 892-0099 TRANSPORTATION (24 hr.): CHEMTREC (800) 424-9300 or (202) 483-7616

PRODUCT INFORMATION AGRICULTURAL PRODUCTS: (800) 682-5368

2. HAZARDS IDENTIFICATION

For EPA FIFRA-specific information see Section 15

Classification

Acute toxicity - Inhalation (Vapors)	Category 3
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Flammable liquids	Category 4

Label elements

EMERGENCY OVERVIEW

Danger



Hazard statements Toxic if inhaled Causes mild skin irritation May cause genetic defects May cause cancer Combustible liquid

Precautionary Statements - Prevention

Read product label prior to using this product. For specific handling instruction refer to Section 7, Handling and Storage

Precautionary Statements - Response

See Section 4, First Aid Measures

Precautionary Statements - Storage For information on Storage and Handling see Section 7.

Precautionary Statements - Disposal

For further information on product and container disposal see Section 13.

Hazards not otherwise classified (HNOC)

Other Information

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects
 No information available

For information on Transportation requirements see Section 14.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight/ Percent	TRADE SECRET
Esfenvalerate	66230-04-4	8.4	
1,2,4-Trimethylbenzene	95-63-6	3.8	
Cumene (isopropylbenzene)	98-82-8	0.1	
Other ingredients	Various CAS#s	88	

* The chemical name, CAS number and/or exact percentage have been withheld as a trade secret

Other ingredients, which may be maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identities are withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by a treating physician or nurse by calling **(800) 892-0099** at any time.

4. FIRST AID MEASURES

EMERGENCY NUMBER (800) 892-0099

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-800-892-0099** for emergency medical treatment information.

EYE CONTACT:

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.

SKIN CONTACT:

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.

INGESTION:

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

INHALATION:

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTES TO PHYSICIAN:

Contains petroleum distillates - vomiting may cause aspiration pneumonia. For skin irritation: dry the skin and apply a vitamin E cream or oil containing a minimum of 15% vitamin E. If vitamin E cream or oil is not available, apply corn or vegetable oil liberally over any painful area of skin.

_ _ _ _ _ _ _ _ _

5. FIRE FIGHTING MEASURES		
Flash point °C	66 °C	
Flash point °F	151 °F	
FLASH POINT METHOD:	Tag closed cup	
EXTINGUISHING MEDIA:	Dry chemical, carbon dioxide, alcohol foam or water spray. High volume water jet extinguisher is unsuitable.	
OSHA FLAMMABILITY CLASS:	IIIA	
NFPA RATING:		
Health:	1	
Flammability:	2	
Reactivity:	0	
Special:	None	

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement. Values were not available in the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.

FIRE FIGHTING INSTRUCTIONS: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen cyanide,

ACCIDENTAL RELEASE MEASURES 6.

VALENT EMERGENCY PHONE NUMBER: (800) 892-0099 CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300 **OBSERVE PRECAUTIONS IN SECTION 8: PERSONAL PROTECTION**

Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. For additional spill response information refer to the North American Emergency Response

Guidebook.

UN/NA NUMBER: Not applicable EMERGENCY RESPONSE GUIDEBOOK NO .: Not applicable

CONTAINMENT: In case of aspill or leak, soak up with sand, earth or systhetic absorbent. Do not use alkaline absorbent. Large spills should be collected mechanically (remove by pumping). Prevent material from entering sewers, waterways, or low areas.

CLEANUP: All flushing and clean-up residuals should be collected for proper disposal to prevent soil and surface, ground and sewer water contamination. Never return spills in original containers for re-use. Dispose of in accordance with local, state and federal regulations.

HANDLING AND STORAGE 7.

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

HANDLING:

Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/PPE immediately if material gets inside. Remove PPE immediately after handling this product. Wash thoroughly and put on clean clothing. Wash the outside of gloves before removing.

Combustible. Heating can release vapors which can be ignited.

STORAGE:

Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Do not store or transport near food or feed. Do not contaminate food or feed. Keep in the original container. Store in a cool, dry, secure place, out of the direct sunlight. Do not store in or around the home. Keep out of reach of children.

EXPOSURE CONTROLS/PERSONAL PROTECTION 8.

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

Mixers, loaders, applicators and other handlers should refer to the product label before use for detailed information on personal protective equipmet (PPE).

EYES & FACE: Do not get this material in your eyes. Eye contact can be avoided by wearing safety goggles or a face shield.

RESPIRATORY PROTECTION: Use this material only in well ventilated areas. If ventilation is not adequate to keep airborne concentrations below recommended exposure standards, approved respiratory protection should be worn.

SKIN & HAND PROTECTION: Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including long pants, long-sleeved shirt and shoes plus socks and chemical-resistant gloves. Remove contaminated clothing.

ENGINEERING CONTROLS: Use in a well ventilated area.

EXPOSURE LIMITS

Chemical Name	ACGIH Exposure Limits	OSHA Exposure Limits	Manufacturer's Exposure Limits
Esfenvalerate	None	None	None
1,2,4-Trimethylbenzene	None	25 ppm TWA 125 mg/m³ TWA	None
Cumene (isopropylbenzene)	None	prevent or reduce skin absorption 50 ppm TWA 245 mg/m ³ TWA	None
Other ingredients	None	None	None

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state Appearance Color	Liquid Viscous Light amber	Odor Odor threshold	Oily, aromatic No information available
PROPERTIES pH Melting point/freezing poir Boiling point/boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limits in Air Upper flammability limits Lower flammability limits Lower flammability limits Vapor pressure Vapor density Specific Gravity Water solubility Solubility in other solvents Partition coefficient Autoignition temperature Decomposition temperature Uiscosity Explosive properties Oxidizing properties Density Bulk density	 No information availab 66 °C 151 °F No information availab No information availab No information availab No information availab No information availab No information availab 0.002 mg/L at 25 °C (7 No information availab No information availab No information availab No information availab No information availab No information availab 	le le le le le le le le le le le le le l	

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical stability

Stable at normal temperatures and storage conditions.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials

Strong oxidizing agents.

Hazardous Decomposition Products

Hazardous thermal decomposition products: Hydrogen cyanide (hydrocyanic acid). Decomposes by reaction with alkaline solutions.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

The acute toxicity information is for this product formulation.

Oral Toxicity LD 50 (rats)	458 mg/kg	EPA Tox Category	II
Dermal Toxicity LD 50 (rabbits)	> 2,000	EPA Tox Category	111
Inhalation Toxicity LC 50 (rats)	2.93 mg/L (4 hour)	EPA Tox Category	IV
Eye Irritation (rabbits)	Slightly irritating	EPA Tox Category	IV
Skin Irritation (rabbits)	Non-irritating	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Negative	EPA Tox Category	Not available

CARCINOGEN CLASSIFICATION

Chemical Name	IARC	OSHA - Select Carcinogens	NTP Carcinogen List
Esfenvalerate	Group 3 Group 2A	Carcinogen	Not listed
1,2,4-Trimethylbenzene	Not listed	Not listed	Not listed
Cumene (isopropylbenzene)	Group 2B	Carcinogen	Not listed
Other ingredients	Not listed	Not Listed	Not listed

TOXICITY OF ESFENVALERATE TECHNICAL

SUBCHRONIC: This product contains a cyano-pyrethroid call esfenvalerate. Esfenvalerate is a nervous system toxin that produced salivation, diarrhea, weakness, ataxia, tremors, and convulsions in test animals exposed to lethal or near lethal single doses. Similar effects are also observed in subchronic tests with laboratory animals. Workers exposed acutely to pyrethroids have experienced temporary skin paresthesia with abnormal sensations including burning, tingling or itching.

CHRONIC/CARCINOGENICITY: Esfenvalerate was not carcinogenic in tests with laboratory animals.

NEUROTOXICITY: Esfenvalerate indicated temporary signs of neurotoxicity in rats at dose levels more than 10 mg/kg.

DEVELOPMENTAL TOXICITY: Esfenvalerate did not produce birth defects in tests with laboratory animals.

REPRODUCTION: Esfenvalerate showed no effects to reproductive performance in a three generation study (rats).

MUTAGENICITY: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

For a summary of the potential for adverse health effects from exposure to this product, refer to Section 2. For information regarding regulations pertaining to this product, refer to Section 15.

12. ECOLOGICAL INFORMATION

AQUATIC ORGANISM TOXICITY: This product is extremely toxic to fish and other aquatic organisms. Tests with Asana XL Insecticide have been conducted in the following species:

LC $_{50}\,$ (96 hour), Rainbow Trout: 0.0048 mg/L; EC $_{50}\,$ (48 hour), D.subspicatus/green algae: 0.0215 mg/L EC $_{50}\,$ (48 hour), Daphnia magna: 0.025 mg/L

OTHER NON-TARGET This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

OTHER ENVIRONMENTAL INFORMATION:

Do not apply directly to water, to areas where surface water is present or to intertidal areas below mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. See Directions for Use on product label for additional precautions and restrictions.

13. DISPOSAL CONSIDERATIONS

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

PRODUCT DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Refer to pesticide label for proper container disposal instructions based on container type and size. Some container types and sizes may be refillable.

DISPOSAL METHODS: Check government regulations and local authorities for approved disposal of this material. Dispose of in accordance with applicable laws and regulations.

14. TRANSPORTATION INFORMATION

DOT (ground) SHIPPING NAME:	When in non-bulk containers: NOT REGULATED, EXEMPTION REQUIREMENT: 49 CFR 173.150bulk containers (>119 gal capacity): NA 1993, Combustible liquid, n.o.s. (Xylene), 3, III; In bulk tankers: RQ, NA 1993, Combustible liquid, n.o.s. (Xylene), 3, III (RQ for Xylene = 100 lb.)
EMERGENCY RESPONSE GUIDEBOOK NO.:	128
ICAO/IATA SHIPPING NAME:	UN 3082, Environmentally hazardous substance, liquid, n.o.s., (esfenvalerate), 9, III, marine pollutant
REMARKS:	Single or inner packaging less than 5 L (liquid) or 5 Kg net (solids) excepted from Dangerous Goods regulations see UN Special Provision 375. For U.S. shipping, Emergency Response Guidebook No. 171.

IMDG SHIPPING NAME:

REMARKS:

UN 3082, Environmentally hazardous substance, liquid, n.o.s., (esfenvalerate), 9, III, marine pollutant EMS# F-A, S-F Flash point = 66 ° C

15. REGULATORY INFORMATION

EPA-FIFRA LABEL INFORMATION THAT DIFFERS FROM OSHA-GHS REQUIREMENTS:

This material is a pesticide product registered by the EPA under FIFRA and is subject to certain labeling requirements under federal pesticide law. These requirements may differ from the classification criteria and hazard information required by OSHA GHS for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the FIFRA pesticide label:

EPA FIFRA SIGNAL WORD: WARNING

- May be fatal if swallowed
- Harmful if inhaled
- Do not get in eyes, on skin or on clothing
- Avoid breathing vapors or spray.

PESTICIDE REGULATIONS: All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

U.S. FEDERAL REGULATIONS: Ingredients in this product are reviewed against an inclusive list of federal regulations. Therefore, the user should consult appropriate authorities. The federal regulations reviewed include: Clean Water Act, SARA, CERCLA, RCRA, DOT, TSCA and OSHA. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

1,2,4-Trimethylbenzene	
TOOA Inventory Lint	

TSCA Inventory List -	*
SARA 313 Chemicals	1.0% de minimis concentration
Cumene (isopropylbenzene)	
TSCA Inventory List -	*
SARA 313 Chemicals	1.0% de minimis concentration
CERCLA Reportable Quantity (RQ):	5000 lb
	2270 kg
	-

SARA (311, 312):	
Immediate Health:	Yes
Chronic Health:	Yes
Fire:	Yes
Sudden Pressure:	No
Reactivity:	No

STATE REGULATIONS: Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities. The state regulations reviewed include: California Proposition 65, California Directors List of Hazardous Substances, Massachusetts Right to Know, Michigan Critical Materials List, New Jersey Right to Know, Pennsylvania Right to Know, Rhode Island Right to Know and the Minnesota Hazardous Substance list. For Washington State Right to Know, see Section 8 for Exposure Limit information. For Louisiana Right to Know refer to SARA information listed under U.S. Regulations above. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

1,2,4-Trimethylbenzene California - Directors List of Hazardous Substances	Present
MA Right To Know	Present
NJ Right To Know	2716 1929
PA Right To Know	Environmental hazard Present
RI Right To Know	Listed
MN Hazardous Substance	Present
Cumene (isopropylbenzene)	
California Proposition 65	carcinogen
California - Directors List of	Present
Hazardous Substances	
MA Right To Know	Present
NJ Right To Know	0542
PA Right To Know	Environmental hazard
RI Right To Know	Listed
MN Hazardous Substance	Skin

For information regarding potential adverse health effects from exposure to this product, refer to Sections 2 and 11.

16. OTHER INFORMATION

REASON FOR ISSUE: SDS NO.: EPA REGISTRATION NUMBER: REVISION NUMBER: REVISION DATE: SUPERCEDES DATE: RESPONSIBLE PERSON(S):	1 12/22/2014 12/23/2014
RESPONSIBLE PERSON(S):	Valent U.S.A. Corporation, Corporate EH&S, (925) 256-2803

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products is regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling. All necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label. The information in this SDS is based on data available to us as of the revision date given herein, and believed to be correct. Contact Valent U.S.A. Corporaton to confirm if you have the most current SDS.

Judgements as to the suitability of information herein for the individual's own use or purposes are necessarily the individual's own responsibility. Although reasonable care has been taken in the preparation of such information, Valent extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the individual's purposes or the consequences of its use.

2014 Valent U.S.A. Corporation