# DATA REQUIREMENTS FOR

Data Code	Title	Data required	Conditions	Volume Number and Pages
0	Index	R		
1	Label	R		
2	Chemistry requirements for the registration of			
	a technical grade of active ingredient (TGAI) or			
	an integrated system product.			
2.1	Applicant's Name and Office Address	R		
2.2	Manufacturer's Name and Office Address and	R		
	Manufacturing Plant's Name and Address			
2.3	Product Trade Name	R		
2.3.1	Other Names	R		
2.4	Common Name	R		
2.5	Chemical Name	R		
2.6	Chemical Abstracts Registry Number	R		
2.7	Structural Formula	R		
2.8	Molecular Formula	R		
2.9	Molecular Weight	R		
2.11	Manufacturing Methods for the TGAI			
2.11.1	Manufacturing Summary	R		
2.11.2	Description of Starting Materials	R		
2.11.3	Detailed Production Process Description	R		
2.11.4	Discussion of Formation of Impurities	R		
2.12	Specifications			
2.12.1	Establishing Certified Limits	R		
2.12.2	Control Product Specification Form	R		
2.13	Preliminary Analysis			
2.13.1	Methodology/Validation	R		
2.13.2	Confirmation of Identity	R		
2.13.3	Batch Data	R		
2.13.4	Impurities of Toxicological Concern	CR	If applicable	
2.14	Chemical and Physical Properties			
2.14.1	Colour	R		
2.14.2	Physical State	R		
2.14.3	Odour	R		
2.14.4	Melting Point / Melting Range	R	Solid at room temperature.	
2.14.5	Boiling Point / Boiling Range	R	Liquid at room temperature.	
2.14.6	Density or Specific Gravity	R	See 8.2.1	
2.14.7	Water Solubility (mg/L)	R	See 8.2.1	
2.14.8	Solvent Solubility (mg/L)	R		
2.14.9	Vapour Pressure	R	See 8.2.1	
2.14.10	Dissociation Constant	R	See 8.2.1	
2.14.11	Octanol/Water Partition Coefficient	R	See 8.2.1	

# DATA REQUIREMENTS FOR

Data Code	Title	Data required	Conditions	Volume Number and Pages
2.14.12	UV/Visible Absorption Spectra	R	See 8.2.1	
2.14.13	Stability (Temperature, Metals)	R		
2.14.14	Storage Stability Data	CR	Required for integrated system products	
2.15	Sampele(s) of Analytical Standards and ROC	R		
2.16	Other Studies/Data/Reports	CR	If available	
4	Toxicology			
4.1	Summaries	R		
4.2	Acute Studies — TGAI			
4.2.1	Acute Oral	R		
4.2.2	Acute Dermal	R		
4.2.3	Acute Inhalation	R		
4.2.4	Primary Eye Irritation	R		
4.2.5	Primary Dermal Irritation	R		
4.2.6	Dermal Sensitization	R		
4.2.7	Potentiation/Interaction	CR	If available	
4.2.8	Antidote	CR	If available	
4.2.9	Other Acute Studies	CR	If available	
4.3	Short-term Studies — TGAI			
4.3.1	Short-term Oral (90-day rodent)	R		
4.3.2	Short-term Oral (90-day and/or 12-month dog)	CR	If available	
4.3.3	Short-term Oral (28-day)	CR	If available	
4.3.4	Short-term Dermal (90-day)	CR	If available	
4.3.5	Short-term Dermal (21/28-day)	R		
4.3.6	Short-term Inhalation (90-day)	CR	Required if there is the likelihood of significant repeated inhalation exposure to the product as a gas, vapor or aerosol	
4.3.7	Short-term Inhalation (21/28-day)	CR	If available	
4.3.8	Other Short-term Studies	CR	If available	
4.4	Long-term Studies — TGAI			
4.4.1	Chronic (rodent)	R	4.4.1 and 4.4.2 could be submitted as a combined study under 4.4.4	
4.4.2	Oncogenicity (rodent species 1)	R	4.4.1 and 4.4.2 could be submitted as a combined study under 4.4.4	
4.4.3	Oncogenicity (rodent species 2)	R		
4.4.4	Combined Chronic/Oncogenicity (rodent)	CR	4.4.1 and 4.4.2 could be submitted as a combined study under 4.4.4	
4.4.5	Other Long-term Studies	CR	If available	
4.5	Special Studies — TGAI			
4.5.1	Multigeneration Reproduction (rodent)	R		

# DATA REQUIREMENTS FOR

Data Code	Title	Data required	Conditions	Volume Number and Pages
4.5.2	Prenatal Developmental Toxicity (rodent)	R		
4.5.3	Prenatal Developmental Toxicity (non-rodent)	R		
4.5.4	Genotoxicity: Bacterial Reverse Mutation Assay	R		
4.5.5	Genotoxicity: In vitro Mammalian Cell Assay	R		
4.5.6	Genotoxicity: In vitro Mammalian Clastogenicity	CR	Required if not addressed in study submitted for 4.5.5	
4.5.7	Genotoxicity: In vivo Cytogenetics	R		
4.5.8	Other Genotoxicity Studies	CR	If available	
4.5.9	Metabolism/Toxicokinetics in Mammals (laboratory animals)	R		
4.5.10	Acute Delayed Neurotoxicity (hen)	CR	Required if the test substance is an organophosphorus substance or is structurally related to other substances that may cause delayed neurotoxicity	
4.5.11	28-day Delayed Neurotoxicity (hen)	CR	Required if results of acute delayed neurotoxicity study indicates effects, or if other available data indicate the potential for this type of delayed neurotoxicity	
4.5.12	Acute Neurotoxicity (rat)	CR	Required if there is neurotoxic potential	
4.5.13	90-day Neurotoxicity (rat)	CR	Required if there is neurotoxic potential	
4.5.14	Developmental Neurotoxicity	CR	Required if neurological effects are observed in other studies Should be considered if test substance: i) causes neuropathology or neurotoxicity in adults; ii) is hormonally active in vivo; or iii) causes other types of nervous system involvement at a developmental stage	
4.8	Other Studies/Data/Reports	CR	If available	
8	Environmental Chemistry and Fate			
8.1	Summaries	R		
8.2	Laboratory Studies			

# DATA REQUIREMENTS FOR

Data Code	Title	Data required	Conditions	Volume Number and Pages
8.2.1	Summary of Physicochemical Properties to Include, Solubility in Water, Vapour Pressure, Octanol:Water Partition Coefficient, Dissociation Constant, UV-Visible Absorption, Density or Specific Gravity (See parts 2 and 3)	R	See 2.14.7, 2.14.9, 2.14.11, 2.14.10, 2.14.13, 2.14.6, and 3.5.6	
8.2.2	Analytical Methodology (parent compound and transformation products)			
8.2.2.1	Soil	CR	If there is a potential for soil exposure	
8.2.2.2	Sediment	CR	If there is a potential for aquatic exposure	
8.2.2.3	Water	CR	See 8.2.2.2	
8.2.2.4	Biota	R		
8.2.3	Laboratory Studies of Transformation			
8.2.3.1	Summary	R		
8.2.3.2	Hydrolysis	R		
8.2.3.4	Biotransformation in Soil			
8.2.3.4.2	Aerobic Soil 20°-30°C	CR	If there is a potential for soil exposure	
8.2.3.5	Biotransformation in Aquatic Systems			
8.2.3.5.2	Aerobic Water 20°-30°C	CR	If there is a potential for aquatic exposure.	
8.2.4	Laboratory Studies of Mobility			
8.2.4.1	Summary	CR		
8.2.4.2	Adsorption/Desorption	CR	If there is a potential for soil or aquatic exposure	
8.4	Storage, Disposal and Decontamination (TGAI or EP)			
8.4.1	Summary	R		
8.5	Other Environmental Fate Studies (TGAI or EP)			
8.5.1	Summary	CR	Based on concerns arising from results of other studies	
8.6	Other Studies/Data/Reports	CR	If available	
9	Environmental Toxicology			
9.1	Summary	CR		
9.3	Non-Target Freshwater Invertebrates			
9.3.1	Summary	CR		
9.3.2	Daphnia sp. Acute	CR	If there is a potential for freshwater exposure	

# DATA REQUIREMENTS FOR

Data Code	Title	Data required	Conditions	Volume Number and
				Pages
9.3.3	Daphnia sp. Chronic (Life-Cycle)	CR	Most sensitive (i.e., one of) daphnid (9.3.3); or fish (9.5.3.1), where there is concern based on acute effects, persistence, potential for exposure or frequency of application	
9.3.4	Laboratory Studies with Other Species	CR	If there is a potential for exposure	
9.5	Fish			
9.5.1	Summaries	CR		
9.5.2	Acute Studies			
9.5.2.1	Cold Water Fish (rainbow trout)	CR	If there is a potential for freshwater exposure	
9.5.2.2	Warm Water Fish (bluegill sunfish)	CR	See 9.5.2.1	
9.5.2.3	Other Freshwater Fish Species	CR	If there is a potential for exposure	
9.5.3	Sublethal and Chronic Studies			
9.5.3.1	Fish, Early Life Cycle Tox. Test	CR	Most sensitive (i.e., one of) daphnid (9.3.3); or fish (9.5.3.1), where there is concern based on acute effects, persistence, potential for exposure or frequency of application	
9.5.3.2	Fish, Life Cycle Tox. Test	CR	Where there is concern based on acute effects, persistence, potential for exposure or frequency of application	
9.5.6	Bioaccumulation	CR	If there is a potential for exposure and log Kow is greater than or equal to 3	
9.6	Wild Birds			
9.6.1	Summary	CR		
9.6.2	Acute Studies			
9.6.2.1	Oral (LD50) Bobwhite Quail	CR	If there is a potential for avian exposure, one of 9.6.2.1 or 9.6.2.2	
9.6.2.2	Oral (LD50) Mallard Duck	CR	See 9.6.2.1	
9.6.2.3	Oral (LD50) Other Species	CR	If avian acute oral toxicity is of concern and there is potential for exposure	
9.6.2.4	Dietary (LC50) Bobwhite Quail	CR	If there is a potential for avian exposure	
9.6.2.5	Dietary (LC50) Mallard Duck	CR	See 9.6.2.4	

# DATA REQUIREMENTS FOR

## **USE SITE CATEGORY (USC # 32): Various Outdoor Sites - TGAI**

Data Code	Title	Data required	Conditions	Volume Number and Pages
9.6.2.6	Dietary (LC50) Other Species	CR	If avian acute dietary toxicity is of concern and there is potential for exposure	
9.6.3	Chronic Studies			
9.6.3.1	Avian Reproduction Bobwhite Quail	CR	Triggered by acute effects, persistence, bioconcentration potential, mammalian reproductive effects, or potential for exposure or frequency of application	
9.6.3.2	Avian Reproduction Mallard Duck	CR	See 9.6.3.1	
9.6.3.3	Avian Reproduction Other Species	CR	See 9.6.3.1	
9.6.6	Special Studies Related to the Intended Use- Pattern (TGAI or EP)	CR	See 9.6.5	
9.7	Wild Mammals			
9.7.1	Summary	CR	Based on concerns arising from results of other studies	
9.8	Non-Target Plants			
9.8.1	Summary	CR		
9.8.2	Fresh Water Algae	CR	If there is a potential for freshwater exposure	
9.8.4	Terrestrial Vascular Plants	CR	If there is a potential for exposure	
9.8.5	Aquatic Vascular Plants	CR	See 9.8.4	
9.9	Other Studies/Data/Reports	CR	If available	
12.5	Foreign Reviews			
12.5.2	Foreign Reviews of Chemistry Requirements for TGAIs or Integrated System Products			
12.5.4	Foreign Reviews of Toxicology			
12.5.8	Foreign Reviews of Environmental Chemistry and Fate			
12.5.9	Foreign Reviews of Environmental Toxicology			
12.7	Comprehensive Data Summaries			

August 15, 2005