United States
Environmental Protection
Agency

Office of Prevention, Pesticides
and Toxic Substances
(7505 P)

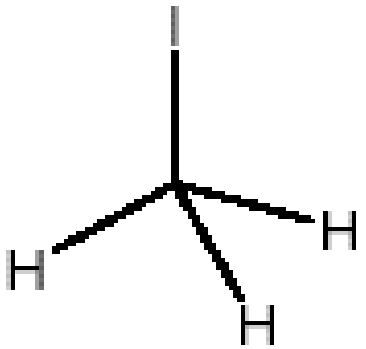
Pesticide Fact Sheet

Name of Chemical: **Iodomethane**
Reason for Issuance: **New Chemical Registration**
Year Issued: **2007**

DESCRIPTION OF CHEMICAL

Generic Name:	TM-425 Technical Iodomethane: CH_3I
Common Name:	None recognized
Trade Name:	Midas Bronze, Midas Gold, Midas 98:2, Midas 50:50, Midas 33:67, and Midas 25:75
EPA Chemical Code:	000011
Chemical Abstracts Service (CAS) Number:	74-88-4
Year of Initial Registration:	2007
Pesticide Type:	Fumigant
Chemical Class:	Alkyl Iodide
Registrant:	Arysta LifeScienc North American Corporation 15401 Weston Parkway, Suite 150 Cary, North Carolina 27513

Chemical Structure:



USE PATTERNS AND FORMULATIONS

Pests/Application Sites: Iodomethane is a pre-plant biocide used to control insects, plant parasitic nematodes, soil borne pathogens, and weed seeds. The compound is registered for use as a preplant soil treatment for field grown strawberries, peppers, tomatoes, stone fruits, tree nuts, grape vines, ornamentals and turf and nursery grown strawberries, stone fruits, tree nuts, and conifer trees.

Types of Formulations: Iodomethane is a liquid under pressure, and is marketed in the following formulations:

Table 1: Product Names	**Percentage of Iodomethane**	**Percentage of Chloropicrin**
Iodomethane Technical	99.8%	----
Midas 98:2	97.8%	1.99%
Midas 50:50	49.9%	49.75%
Midas EC Bronze	49.9%	44.78%
Midas 33:67	32.93%	66.67%
Midas EC Gold	32.93%	61.69%
Midas 25:75	24.95%	74.63%

Application Methods: The application methods are as follows: Raised bed – Shank Injection; Broadcast/Flat Fume – Shank Injection; Auger Probe - Deep Injection; and Raised Bed - Drip Application. Applications via raised bed and broadcast/flat fume are covered with a tarp for a minimum of five days and with a minimum of seven days before planting occurs. For buried drip tape application, ten days must elapse before planting.

Application Rates: The application rates for Iodomethane are as follows:

- Raised bed – Shank Injection – 75 to 175 lbs. active ingredient (a.i.)/treated acre
- Raised Bed – Drip Application – 100 – 175 lbs. a.i./treated acre
- Broadcast/Flat Fume – 100 to 175 lbs. a.i./acre
- Deep Auger Probe Injection – 0.5 to 2 lbs. a.i./injection site

SCIENCE FINDINGS

I. SUMMARY OF PHYSICAL AND CHEMICAL PROPERTIES

Table 2: Physical-Chemical Properties of Iodomethane Technical – CH_3I

Parameter	Comment
Color	Clear to light yellow
Physical State	Liquid
Odor	Ether-like
Molecular Weight	141.94 g/Mol
Molecular Formula	CH_3I
UV Absorption	2.5 absorbance units (maximum) at ca. 200 nm, with a smaller peak (0.25 au) at ca. 250 nm)
Melting Point	-66.5^0C
Boiling Point	42.4^0C
Specific Gravity	2.8 at 20^0C
Henry's Law Constant	5.23×10^{-3} atm-m^3/mole
Partition Coefficient (Octanol/Water, log K_{ow})	1.51 – 1.69
Water Solubility	1420 mg/L at 25^0C
Density	2.28 g/mL at 20^0C
Vapor Density (Air = 1)	4.9
Vapor Pressure	405.9 mm Hg at 25^0C

II. SUMMARY OF TOXICITY DATA

HUMAN HEALTH
A. Acute Toxicity

Table 3: Acute Toxicity Summary for Iodomethane Technical		
Study Type	**Results**	**Toxicity Category**
Acute Oral (rat)	LD_{50} > 79.8 mg/kg (males) > 131.9 mg/kg (females)	II
Acute Oral (mouse)	LD_{50} > 155 mg/kg (males) > 214 mg/kg (females)	II
Acute Dermal (rat)	LD_{50} > 2000 mg/kg (both sexes) (limit test)	III
Acute Inhalation (rat)	LD_{50} > 4 mg/L (both sexes)	IV
Primary Eye Irritation (rabbit)	Corrosive: Corneal opacity and bulging, conjunctivitis, iritis, corneal neo-vascularization and sloughing of epithelium, blanching of nictitating membrane,	I
Primary Skin Irritation (rabbit)	Well defined erythema extending beyond test sites, blanching, and light-severe edema	II
Dermal Sensitization	Non-sensitizer	N/A

Table 4: Acute Toxicity Categories for MIDAS 98:2, MIDAS 50:50, and MIDAS™ 25:75		
Study Type/Findings	Toxicity Categories for Midas 50:50, Midas 33:67, Midas 25:75, Midas Gold and Midas Bronze	Toxicity Categories for Midas 98:2
Acute Oral Toxicity	II	II
Acute Dermal Toxicity	III	III
Acute Inhalation Toxicity	II	IV
Primary Eye Irritation	I	I
Primary Dermal Irritation	I	II
Dermal Sensitization	Positive for sensitization	Positive for sensitization

B. Subchronic Inhalation Toxicity

In a subchronic inhalation toxicity study, rats were exposed via whole-body inhalation for 6 hours/day, 5 day/week for 13 weeks at analytical concentrations of 0, 5, 21, or 70 ppm (0, 0.029, 012, or 0.41 mg/L/day). Ten rats/sex/concentration were sacrificed after 4 weeks, and the remaining 10 rats/sex/concentration were sacrificed after 13 weeks. There were no effects of treatment on mortality, ophthalmology, urinalysis, hematology, organ weights, or gross pathology. The systemic LOAEL for this study is 70 ppm based on initial decreases in body weights, body weight gains, and food consumption (males). The NOAEL is 21 ppm (HEC = 3.8 or 15.8 ppm for non-occupational and occupational risk assessments, respectively). The port-of-entry LOAEL is 70 ppm based on degeneration of the olfactory epithelium. The NOAEL is 21 ppm (HEC = 4.5 or 5.8 ppm for non-occupational and occupational risk assessments, respectively).

C. Developmental Toxicity

In a developmental toxicity study, groups of 24 female New Zealand White rabbits were dynamically exposed to iodomethane vapor in whole-body inhalation chambers at analytical concentrations of 0, 2, 10, or 20 ppm (0, 0.012, 0.058, or 0.12 mg/L/day) six hours per day on gestation days (GDs) 6 through 28. The maternal NOAEL is 20 ppm; no maternal LOAEL was identified. The developmental toxicity LOAEL is 20 ppm based on increased fetal losses and decreased fetal weights (↓20%). The developmental toxicity NOAEL is 10 ppm (HEC = 7.4 or 23 ppm for non-occupational and occupational risk assessments, respectively).

In a developmental toxicity study, iodomethane was administered via the inhalation route (whole body) to 24 New Zealand White rabbits/group at concentrations of 0 or 20 ppm during GD 6-28 (Control and Group 2), GD 6-14 (Group 3), GD 15-22 (Group 4), GD 23-24 (Group 5), GD 25-26 (Group 6), or GD 27-28 (Group 7) for 6 hours/exposure day**.** This study was not intended to fulfill the guideline requirement or establish NOAELs and LOAELs but rather was conducted to determine the critical period of exposure during gestation that resulted in fetal loss as observed in a previously evaluated guideline developmental toxicity study in rabbits.

D. Acute Neurotoxicity

In an acute neurotoxicity study in rats, iodomethane was administered *via* the inhalation route (whole body) to 12 rats/sex/group at concentrations of 0, 27, 93, or 401 ppm for 6 hours. The NOAEL is 27 ppm (HEC = 10 ppm for both bystander and occupational risk assessments). The LOAEL is 93ppm based on clonic convulsions, decreased body temperatures, and decreased motor activity.

E. Carcinogenicity

The Agency evaluated the rodent bioassays and mechanistic data available for iodomethane. Evidence of carcinogenicity in the iodomethane database manifested as an increased incidence of thyroid follicular cell tumors observed in both the Inhalation Chronic Toxicity/Carcinogenicity Study in Rats and the Carcinogenicity Study in Mice. The Agency concluded that the key event

influencing the thyroid tumor response is the sustained stimulation of cell proliferation by TSH, consistent with the increase in thyroid follicular cell tumors only. Based on the evidence that rats are substantially more sensitive than humans to the development of thyroid follicular cell tumors in response to thyroid hormone imbalance, the Agency classified iodomethane as 'not likely to be carcinogenic to humans in the absence of altered thyroid hormone homeostatis'. The dose-response for cancer effects was considered in the risk assessments and the exposures expected from this use are well below those that would cause thyroid effects leading to cancer.

F. Mutagenicity

Mutagenicity was not demonstrated in the following tests: Bacterial Reverse Mutation Test; *In Vitro* Mammalian Cell Mutation Test in Chinese Hamster Ovary Cells; and a *In Vitro* Micronucleus Assay in Mice. However, in the *In Vitro* Chromosomal Aberration in Chinese Hamster Ovary Assay, iodomethane was positive for induction of structural chromosome aberrations (clastogenesis), but negative for induction of numerical aberrations in CHO cells.

G. Metabolism

A rat metabolism study comparing absorption after oral and inhalation administration indicated that iodomethane is quickly absorbed through both routes of exposure. In contrast, the elimination profile indicates that excretion of ^{14}C-labeled iodomethane is biphasic with an initial half-life of 5-7 hours and a terminal half-life of approximately 116-136 hours.

H. Mechanistic Data

An extensive mechanistic data set, as well as a physiologically based pharmacokinetic (PBPK) model, are available for iodomethane. These data and model constitute a sophisticated effort to better characterize the toxicity profile for this compound in terms of developmental toxicity, respiratory tract lesions, and thyroid hormone perturbations identified as the critical effects of iodomethane exposure. In addition, the use of a PBPK model that takes into consideration the toxicokinetic aspect of iodomethane exposure enables the Agency to use chemical-specific parameters to determine the most appropriate dose metric and internal dose in calculating human equivalent concentrations (HECs) instead of the default inputs used in the Agency's Reference Concentration (RfC) methodology. The Agency has reviewed these data and their usefulness to calculate human equivalent concentrations (HECs) based on chemical-specific data. In general, the model and the mechanistic studies used to provide its inputs are considered adequate and their results have been incorporated into this risk assessment.

I. Observational Human Data

The Observational Human Study was not intended to provide NOAELs/LOAELs for risk assessment purposes but rather to better characterize the typical physiological distribution of inorganic iodide between the fetus and its mother (a critical parameter in the iodomethane PBPK model). In the study, maternal and cord blood samples (cord blood was used as a surrogate for fetal blood) were collected from 92 mothers delivering at full-term (37-41 weeks gestation) and 31 mothers delivering pre-term (29 to < 37 weeks gestation). It is important to note that **study participants were not exposed to any test article** and that the samples used in this study were

aliquots of samples routinely collected during labor and delivery.

The Agency has reviewed these data and its usefulness to calculate human equivalent concentrations (HECs) based on chemical-specific data. The mechanistic and observational human studies were intended to either define the dose metric or provide compound-specific inputs for the PBPK model. To derive HECs using the PBPK model, internal dose metrics are predicted for the test species in which the adverse effect occurred and then the version of the PBPK model for humans is used to predict the inhalation exposure concentration (HEC) that would result in the same dose metric as in the animal. The model is a sophisticated effort to describe the kinetics of methyl iodide following inhalation exposure and the kinetics of iodide as a metabolite. It describes nasal tract dosimetry and glutathione (GSH) depletion in the rat to evaluate nasal toxicity, iodide kinetics in the pregnant rabbit to address developmental toxicity, and distribution of methyl iodide to the brain to describe the dose metric for neurotoxic effects. The model has also been parameterized for the human and Monte Carlo analyses were performed to describe human variability. The review was carried out using the framework described in Clark et al., 2004. The results of the evaluation were described focusing on the rat and human nasal modeling , the rabbit and human pregnancy modeling, the rat and human neurotoxicity model, modeling human variability, and model documentation. The strengths and limitations of the modeling were identified. The nasal modeling for rat and human was concluded to be adequate to estimate a human equivalent concentration. Selection of the appropriate degree of GSH depletion to predict nasal olfactory toxicity was dependent on additional factors beyond the PBPK/PD modeling, including judgments about the relationship of this measure with toxicity and the linkage of the time-course of exposure concentrations with the prediction of GSH depletion. The pregnancy modeling was found to be adequate to estimate a range of human equivalent concentrations. The human variability analysis was considered to provide perspective on the default value of 3 to address human pharmacokinetic variability. Similarly, the neurotoxicity model was found to be adequate to estimate a human equivalent concentration based on iodomethane brain concentrations. In general, the model and mechanistic studies used to provide its inputs were considered adequate and their results have been incorporated into the Agency's risk assessment.

II. TOXICITY ENDPOINTS

Based on the toxicity profile and the major exposure routes of iodomethane, endpoints have been selected for the residential/bystanders and occupational human health risk assessments. The Agency used the reference concentration (RfC) methodology along with a PBPK model to derive the human equivalent concentration (HEC) for inhalation exposures. Under the RfC methodology and the PBPK model approach, endpoint selection was based on the HECs which were derived from the NOAELs in selected studies. The specific concentrations and endpoints for the exposure scenarios are summarized below:

A. Acute Inhalation - Non-Occupational (Bystander) and Occupational (Handler*)*

Three critical endpoints have been identified: nasal histopathology in the subchronic inhalation toxicity study in rats, the fetal losses in the developmental toxicity study in rabbits, and neurotoxicity in rats. An HEC of 4.5 or 5.8 ppm was selected (bystander and occupational risk assessments, respectively) from the NOAEL of 21 ppm based on degeneration of the olfactory epithelium. For the developmental endpoint, the Agency selected an HEC of 7.4 or 23 ppm (bystander and occupational risk assessments, respectively) from the NOAEL of 10 ppm based on fetal losses and decreased fetal weights in a developmental toxicity study in rabbits at the LOAEL of 20 ppm. The HEC for the neurotoxicity endpoint is 10 ppm (for both bystander and occupational exposures) based on clonic convulsions, decreased body temperature, and decreased motor activity.

B. Short-, and Intermediate-term Inhalation

1. Non-occupational (Bystander)

An HEC of 1.25 ppm from the NOAEL of 5 ppm was selected based on decreased pup weight and weight gain, decreased thymus weights, and delays in vaginal patency acquisition seen in the multigeneration reproduction toxicity study at the LOAEL of 20 ppm.

2. Occupational (Handler)

An HEC of 3.7 ppm was selected from the NOAEL of 21 ppm based on minimal to mild degeneration of the olfactory epithelium seen at the LOAEL of 70 ppm in the subchronic inhalation toxicity study in rats.

C. Long-term Inhalation

1. Non-occupational (Bystander)

An HEC of 0.89 ppm from the NOAEL of 5 ppm was selected based on increased incidence of salivary gland squamous cell metaplasia seen at the LOAEL of 20 ppm observed in a rat chronic toxicity/carcinogenicity study.

2. Occupational (Handler)

An HEC of 3.75 ppm from the NOAEL of 5 ppm was selected based on increased incidence of salivary gland squamous cell metaplasia seen at the LOAEL of 20 ppm observed in a rat chronic toxicity/carcinogenicity study.

III. UNCERTAINTY FACTOR

Iodomethane has been classified as a non-food use pesticide. Consequently, this chemical is not subject to the FQPA (1996. When conducting inhalation risk assessments, the magnitude of the

UFs applied is dependent on the methodology used to calculate risk. The risk assessment was based on the RfC methodology developed by the Office of Research and Development (ORD) and the PBPK model developed by the registrant for the derivation of inhalation reference concentrations (RfCs) and human equivalent concentrations (HECs) for use in margin of exposure (MOE) calculations. Since both of these approaches take into consideration the pharmacokinetic (PK) but not pharmacodynamic (PD) differences between test species and humans, the UF for interspecies extrapolation was reduced to 3X while the UF for intraspecies variation was retained at 10X. Thus, when using the RfC methodology, the overall UF is customarily 30X.

IV. RESIDUE CHEMISTRY

Plant metabolism studies on strawberries and tomatoes showed that iodomethane is extensively metabolized and incorporated into plant constituents, primarily carbohydrates. Iodide levels in the raw commodities were comparable to background levels found in control samples. Finite residues of toxicological concern are highly unlikely, and the pre-plant fumigant application of iodomethane is considered to be a non-food use and tolerances are not needed.

V. FOOD QUALITY PROTECTION ACT CONSIDERATIONS

Since dietary exposure is not expected and there are no residential uses proposed for iodomethane, the provisions of the Food Quality Protection Act (FQPA) of 1996. An aggregate risk assessment was not conducted because inhalation is the only route of exposure.

VI. HUMAN EXPOSURE/RISK SUMMARY

A. Dietary Exposure and Risk

Iodomethane is considered a non-food use chemical, and the Agency concluded tolerances are not required for iodomethane. As a result, a risk assessment was not conducted for this exposure scenario.

B. Estimated Drinking Water Concentrations

Based on environmental fate data, the residual contents in soils, and Tier I and II models estimated concentrations, the Agency does not expect iodomethane to adversely impact ground water or surface water. Tier II PRZMS for surface water and Tier I SCIGROW for ground water were used to estimate iodomethane concentrations. These concentrations were in the nanograms per Liter (ng/L), and parts per trillion range. The Agency conducted a qualitative drinking water assessment and determined that no risk are expected from this potential exposure.

C. Dermal Exposure and Risk

In the general population, dermal exposure to iodomethane is not expected. Dermal exposure of workers to iodomethane of any significance is not expected based on the delivery systems used

(e.g., soil injection or drip irrigation), packaging (i.e., pressurized cylinders), and emission reduction technologies (e.g., tarping). The high vapor pressure of iodomethane also makes significant dermal exposure unlikely and quantifying any potential low level exposures very difficult. Therefore, a quantitative dermal exposure assessment was not conducted.

D. Acute Inhalation Exposure and Risk

The Agency conducted a quantitative acute exposure assessment. Because of iodomethane's anticipated use pattern, its emission profile and the nature of its toxicity, the Agency believes that the acute exposure assessment is protective for other durations of exposure.

Releases of fumigants such as iodomethane can be categorized in two distinct manners. Ambient air levels from multiple area sources could occur from many applications in a region (e.g., several farms in a specific valley), or alternatively, off-gassing of iodomethane can occur from a known area source (e.g., a treated agricultural field).

1. Non-Occupational (Bystander) Exposure and Risk - Ambient Air

Exposures from ambient sources were qualitatively evaluated based on physical-chemical properties and environmental fate characteristics of iodomethane. Ambient air monitoring data were not available since iodomethane is not currently widely used. Ambient air exposures could potentially occur in proximity to agricultural areas where there is significant use during a particular growing season on a regional basis (e.g. in coastal areas of California during field fumigation prior to strawberry growing season). However, the Agency does not believe that ambient air exposures to bystanders are likely to be a significant concern based on a comparison of the characteristics of iodomethane with those of methyl bromide and the ambient air monitoring data available for methyl bromide.

2. Non-Occupational (Bystander) and Occupational (Handler Exposure and Risk – Off-gassing

To estimate the bystander and occupational exposure and risk resulting from the off-gassing of a treated agricultural field, the Agency used the Probabilistic Exposure and Risk model for Fumigants (PERFUM model). The PERFUM model uses emissions data from field volatility studies and five years of meteorological data to calculate downwind air concentrations from a treated field. PERFUM analyses were completed for field sizes ranging from 1 to 40 acres using weather data representative of the geographic locations where major iodomethane use is anticipated and emissions data from representative locations.

In determining the buffer zone distances to require for iodomethane the following tables were used to analyze the risk. Three types of analysis were considered as follows: (1) Table 5 (Table 12 in the risk assessment) provides buffer distances (in meters) where target concentrations (MOE=30) are achieved, for example the 95th percentile on the maximum distance distribution; (2) Table 6 shows the percentile of exposure for pre-selected buffer

distances (in meters and feet) and; Table 7 uses distributions of air concentrations at a specific buffer distance (in feet) from the field edge to calculate Margins of Exposure (MOEs) where the target MOE=30.

These analyses demonstrate risks associated with a range of input factors including: (1) Flux – High emissions for each application type; (2) Weather – Stations that have low, medium and high results; (3) Field size – Largest field size for each buffer distance range (e.g. for the range of 20 to 40 acres, the estimates are for 40 acres); (4) Application rate – Maximum rate was used (Note: The risk picture is similar for all rates because the tables are scalable) and: (5) Endpoints – Risk estimates for three distinct endpoints were examined (nasal lesions, neurotoxicity, and fetal loss).

Buffer zones to be required for iodomethane were chosen by examining this type of output in an iterative fashion. The buffer zone distances required for iodomethane are those shown in Table 4. These distances were determined to provide adequate margins of safety based on the magnitude of the MOEs considering the reasonable worst case represented by the combination of the highest flux and weather in the analysis (Bradenton/Guadalupe). It was also noted that because of the high percentiles of exposure being considered, there is a diminished change in the MOEs as buffer distances increase.

Table 5: Buffer Distances (in meters) Where Target Concentrations (MOE=30) Are Achieved

Comparison Of Results For Iodomethane PERFUM Buffer Distributions Based On A 40 Acre Square Field, All Weather Data, And All Flux Profiles At A UF=30 And Maximum Application Rate (175 lb ai/A) For All HECs Of Concern															
%tile Of Expo.	Ventura CA			Bakersfield CA			Flint MI			Tallahassee FL			Bradenton FL		
	Nasal	Fetal Loss	Neuro	Nasal	Fetal Loss	Neuro	Nasal	Fetal Loss	Neuro	Nasal	Fetal Loss	Neuro	Nasal	Fetal Loss	Neuro
Flux – Watsonville CA Flat Fume															
50	5	0	0	5	0	0	5	0	0	10	0	0	30	5	5
75	15	5	5	15	5	5	10	5	0	35	5	5	60	5	10
90	45	5	5	35	5	5	35	5	5	70	5	5	105	20	55
95	75	5	5	50	5	15	50	5	5	100	10	15	145	40	90
99	185	70	130	80	10	65	90	15	5	155	40	80	230	85	175
99.9	405	185	370	115	30	130	145	45	85	235	70	125	310	125	260
99.99	580	185	380	120	35	140	150	45	120	240	75	140	330	145	265
Flux – Manteca CA Flat Fume															
50	25	5	5	25	5	15	15	0	5	40	5	15	70	5	50
75	50	5	25	45	5	40	40	5	30	70	5	45	110	30	95
90	90	5	50	70	5	75	70	5	60	115	30	95	170	60	150
95	125	25	95	95	20	100	90	15	85	155	45	120	215	85	195
99	255	100	295	130	45	150	145	50	155	215	75	170	325	140	295
99.9	425	230	520	175	70	225	240	90	260	355	130	280	415	195	410
99.99	480	305	565	190	70	235	245	90	290	360	130	415	425	210	445
Flux – Plant City FL Tarped Raised Bed															
50	NA	NA	NA	NA	NA	NA	5	0	0	5	0	0	20	0	0
75	NA	NA	NA	NA	NA	NA	5	0	0	15	5	0	60	5	5
90	NA	NA	NA	NA	NA	NA	20	5	5	45	5	5	105	10	35
95	NA	NA	NA	NA	NA	NA	40	5	5	70	5	5	135	30	65
99	NA	NA	NA	NA	NA	NA	75	5	5	110	10	40	215	65	135

Comparison Of Results For Iodomethane PERFUM Buffer Distributions Based On A 40 Acre Square Field, All Weather Data, And All Flux Profiles At A UF=30 And Maximum Application Rate (175 lb ai/A) For All HECs Of Concern															
%tile Of Expo.	Ventura CA			Bakersfield CA			Flint MI			Tallahassee FL			Bradenton FL		
	Nasal	Fetal Loss	Neuro	Nasal	Fetal Loss	Neuro	Nasal	Fetal Loss	Neuro	Nasal	Fetal Loss	Neuro	Nasal	Fetal Loss	Neuro
99.9	NA	NA	NA	NA	NA	NA	125	25	100	210	55	85	260	105	185
99.99	NA	NA	NA	NA	NA	NA	130	25	105	215	55	95	285	130	190
Flux – Oxnard CA Tarped Raised Bed															
50	60	5	25	55	5	35	30	0	5	NA	NA	NA	NA	NA	NA
75	150	25	130	90	5	85	75	5	40	NA	NA	NA	NA	NA	NA
90	250	85	235	135	30	135	130	30	110	NA	NA	NA	NA	NA	NA
95	300	115	295	160	50	165	175	55	160	NA	NA	NA	NA	NA	NA
99	425	195	390	225	85	225	270	105	225	NA	NA	NA	NA	NA	NA
99.9	530	250	470	280	120	280	400	175	390	NA	NA	NA	NA	NA	NA
99.99	565	265	500	285	125	295	410	185	400	NA	NA	NA	NA	NA	NA
Flux – Guadalupe CA Tarped Raised Bed															
50	80	5	5	70	5	35	50	5	5	NA	NA	NA	NA	NA	NA
75	160	40	100	110	20	75	95	15	30	NA	NA	NA	NA	NA	NA
90	260	90	190	150	45	120	150	45	90	NA	NA	NA	NA	NA	NA
95	325	130	260	175	65	150	190	70	125	NA	NA	NA	NA	NA	NA
99	460	225	365	250	100	215	300	120	220	NA	NA	NA	NA	NA	NA
99.9	615	305	450	305	125	325	390	180	365	NA	NA	NA	NA	NA	NA
99.99	665	350	455	305	130	345	410	190	375	NA	NA	NA	NA	NA	NA
Flux – LaSelva CA Drip Irrigation															
50	20	0	5	35	5	5	5	0	0	15	0	0	60	5	5
75	85	5	55	75	5	40	30	5	5	75	5	10	140	35	110
90	160	35	135	125	20	90	80	5	45	150	30	100	260	95	205
95	245	70	185	165	45	125	120	10	85	195	55	160	345	145	285
99	345	150	280	235	85	195	185	65	165	300	110	240	475	220	430
99.9	500	215	350	340	125	260	385	145	270	475	205	310	660	330	555
99.99	515	225	380	375	125	275	460	175	275	490	210	315	685	350	560
Flux - Camarillo CA Drip Irrigation															
50	5	0	0	5	0	0	5	0	0	5	0	0	30	5	5
75	5	5	5	10	5	5	10	5	5	25	5	5	65	5	5
90	45	5	5	25	5	10	30	5	5	60	5	5	110	20	15
95	70	5	5	40	5	25	50	5	15	85	5	20	140	40	30
99	165	50	145	65	5	55	90	10	60	135	30	55	220	75	85
99.9	325	175	320	110	20	105	135	40	95	225	65	110	290	130	155
99.99	425	245	360	115	25	110	165	50	125	230	70	135	315	130	170
Flux - Guadalupe CA Drip Irrigation															
50	45	5	5	45	5	15	40	5	15	60	5	15	95	25	35
75	70	5	15	65	5	45	70	5	45	105	25	40	145	50	60
90	120	25	25	95	25	90	105	25	80	165	55	85	215	85	100
95	155	45	50	120	40	120	135	40	115	210	75	125	270	120	135
99	355	175	360	170	65	185	230	90	220	295	120	195	400	190	250
99.9	630	330	655	245	105	290	400	145	730	460	195	345	525	270	390
99.99	795	480	890	250	105	290	450	145	1440	505	210	370	530	285	410

Table 6: Percentile of Exposure at Designated Buffer Distances (in feet and meters)

Iodomethane All Flux & Weather Data													
Field Size	Buffer	Buffer	Rate	Output	Percentile of Exposure At Designated Buffer Distances								
	(ft)	(m)			Ventura CA			Flint MI			Bradenton FL		
					Nasal	Fetal Loss	Neuro	Nasal	Fetal Loss	Neuro	Nasal	Fetal Loss	Neuro
Flux - Manteca CA Flat Fume													
>20	500	152	175	Max	95	99	97	99	99.99	97	85	99	90
(40A)			(100%)	Whole	99	99.9	99	99.9	99.99	99.9	97	99.9	99
>10 - 20	300	91	175	Max	95	99	97	99	99.99	99	85	99	85
(20A)			(100%)	Whole	99	99.9	99	99.9	99.99	99.9	97	99.9	99
>5 - 10	100	30	175	Max	90	99	95	95	99.9	95	65	95	70
(10A)			(100%)	Whole	99	99	99	99	99.99	99	95	99	95
Up to 5	50	15	175	Max	95	99	95	97	99.99	97	70	97	70
(5A)			(100%)	Whole	99	99.9	99	99	99.99	99	95	99	95
Flux - Plant City FL Tarped Raised Bed													
>20	500	152	175	Max	NA	NA	NA	99.99	99.99	99.99	95	99.99	99
(40A)			(100%)	Whole	NA	NA	NA	99.99	99.99	99.99	99	99.99	99.9
>10 - 20	300	91	175	Max	NA	NA	NA	99.99	99.99	99.99	95	99.99	99
(20A)			(100%)	Whole	NA	NA	NA	99.99	99.99	99.99	99	99.99	99.9
>5 - 10	100	30	175	Max	NA	NA	NA	99	99.99	99.99	90	99.99	99
(10A)			(100%)	Whole	NA	NA	NA	99.9	99.99	99.99	99	99.99	99.9
Up to 5	50	15	175	Max	NA	NA	NA	99.99	99.99	99.99	95	99.99	99.99
(5A)			(100%)	Whole	NA	NA	NA	99.99	99.99	99.99	99	99.99	99.99
Flux - Guadalupe CA Tarped Raised Bed													
>20	500	152	175	Max	70	95	85	90	99	95	55	85	70
(40A)			(100%)	Whole	95	99	97	99	99.9	99	90	99	97
>10 - 20	300	91	175	Max	70	97	85	90	99	97	50	85	70
(20A)			(100%)	Whole	97	99	97	99	99.9	99	90	99	97
>5 - 10	100	30	175	Max	65	95	80	80	99	95	35	80	65
(10A)			(100%)	Whole	95	99	97	97	99.9	99	90	97	95
Up to 5	50	15	175	Max	75	97	90	85	99.99	99	45	85	75
(5A)			(100%)	Whole	97	99	99	99	99.99	99.9	90	97	97
Flux - Guadalupe CA Drip Irrigation													
>20	500	152	175	Max	90	97	97	95	99.99	97	75	97	95
(40A)			(100%)	Whole	99	99	99	99	99.99	99	97	99	99
>10 - 20	300	91	175	Max	90	97	97	95	99.99	97	70	97	95
(20A)			(100%)	Whole	99	99	99	99	99.99	99	97	99	99
>5 - 10	100	30	175	Max	85	97	95	85	99	90	40	90	85
(10A)			(100%)	Whole	97	99	99	97	99.9	99	90	99	97
Up to 5	50	15	175	Max	90	97	90	90	99	90	40	90	80
(5A)			(100%)	Whole	97	99	99	99	99.9	99	90	99	97

Table 7: MOEs At Required Buffer Distances (in feet)

Iodomethane MOEs At Varied Distances From Treated Fields: All Field Sizes, Application Rate 175 lb ai/acre, Various Weather & Emissions		
Inputs	%tile	MOEs At Various Distances

		Nasal Lesions				Fetal Loss			
		5A 50 ft	10A 100 ft	20A 300ft	40A 500 ft	5A 50 ft	10A 100 ft	20A 300ft	40A 500 ft
Ventura & Manteca FF (Flat Fume)	50	272	272	594	1001	447	447	976	1646
	75	81	81	131	130	133	133	215	214
	90	51	51	70	70	84	84	115	115
	95	43	42	55	57	71	70	90	93
	99	32	30	38	38	53	50	62	62
	99.9	20	18	22	22	34	30	36	35
Ventura & Guad TRB (Tarped Raised Bed)	50	199	428	594	601	328	704	976	988
	75	70	97	104	111	115	159	170	183
	90	45	49	51	49	74	81	84	81
	95	35	37	36	35	58	61	59	58
	99	25	24	23	22	41	39	38	37
	99.9	18	16	16	15	30	27	26	25
Ventura & Guad Drip (Drip Application)	50	231	231	594	601	380	380	976	988
	75	70	70	111	120	115	115	183	197
	90	43	43	59	61	71	71	97	101
	95	37	36	48	49	61	59	78	81
	99	28	26	33	33	45	43	54	54
	99.9	16	14	17	17	26	23	28	28
Flint & Manteca FF (Flat Fume)	50	335	335	594	601	551	551	976	988
	75	97	97	143	143	159	159	235	235
	90	64	57	77	81	105	93	126	133
	95	53	48	64	64	87	78	105	105
	99	39	34	45	45	64	57	74	74
	99.9	29	25	31	31	47	41	51	51
Flint & Plant City TRB (Tarped Raised Bed)	50	594	594	1005	1001	976	976	1652	1646
	75	157	143	199	231	259	235	328	379
	90	97	86	120	120	159	141	197	197
	95	81	70	91	91	133	115	150	149
	99	59	49	61	61	97	81	101	101
	99.9	43	37	42	42	71	61	70	69
Flint & Guad TRB (Tarp Raised Beds)	50	272	272	594	601	447	447	976	988
	75	81	77	111	120	133	126	183	197
	90	49	46	61	61	81	76	101	101
	95	40	36	46	46	66	59	76	76
	99	29	26	30	30	48	42	50	49
	99.9	23	19	21	20	37	31	35	34
Flint & Guad Drip	50	335	335	594	601	551	551	976	988
	75	81	81	120	120	133	133	197	197
	90	48	46	64	67	78	76	105	110
	95	40	38	51	53	66	62	84	87
	99	29	28	36	37	48	46	59	61
	99.9	21	20	24	24	35	32	40	40
Bradenton & Manteca FF (Flat Fume)	50	177	177	335	428	290	290	551	704
	75	61	64	97	103	101	105	159	170
	90	38	37	53	57	62	61	87	93

Iodomethane MOEs At Varied Distances From Treated Fields: All Field Sizes, Application Rate 175 lb ai/acre, Various Weather & Emissions									
Inputs	%tile	MOEs At Various Distances							
		Nasal Lesions				Fetal Loss			
		5A 50 ft	10A 100 ft	20A 300ft	40A 500 ft	5A 50 ft	10A 100 ft	20A 300ft	40A 500 ft
	95	31	30	41	43	51	50	68	71
	99	22	21	28	29	37	35	45	47
	99.9	17	16	20	20	27	26	32	33
Bradenton & Plant City TRB (Tarped Raised Bed)	50	335	335	594	601	551	551	976	988
	75	103	103	157	177	170	170	259	290
	90	64	57	77	81	105	93	126	133
	95	51	43	57	59	84	71	93	97
	99	34	30	37	37	57	49	61	61
	99.9	27	23	27	27	44	38	44	44
Bradenton & Guad TRB (Tarped Raised Bed)	50	177	177	335	428	290	290	551	704
	75	57	57	86	91	93	93	141	149
	90	32	29	39	41	52	48	64	68
	95	24	22	29	29	40	37	47	48
	99	17	15	18	18	28	25	30	30
	99.9	14	12	14	13	22	20	22	22
Bradenton & Guad Drip (Drip application)	50	157	177	335	333	259	290	551	548
	75	53	53	86	91	87	87	141	149
	90	32	32	45	48	52	52	74	78
	95	26	26	35	37	43	42	58	61
	99	19	18	24	25	31	30	39	41
	99.9	14	13	17	17	23	22	27	28

3. Occupational Exposure and Risk

Occupational exposure and risks exceed the Agency's level of concern for some workers (tractor drivers, co-pilots, tarp monitors, and shovelers) when no respiratory protection is used. These risks are sufficiently reduced with respiratory protection to levels below the Agency's level of concern. Respirators will be required for all workers with unacceptable risks. However, tractor drivers and co-pilots will have the option of using a fan/air duct system that meets certain specifications in lieu of a respirator. Worker exposure five days after application, even without any respiratory protection, does not exceed the Agency level of concern.

E. Aggregate Exposure and Risk

The physical/chemical characteristics, the environmental fate data, and results of metabolism studies in plants assure that there is no reasonable expectation of finite residues in or on food and drinking water when iodomethane is applied according to label directions. Therefore, iodomethane does not require food tolerances, is considered to be a 'non-food use' chemical, and

is not subject to the amendments to the Federal Food, Drug, and Cosmetic Act (FFDCA) promulgated under the Food Quality Protection Act (FQPA) of 1996, and an aggregate risk assessment is not required.

F. Cumulative Risk

Unlike other pesticides for which the Agency has followed a cumulative risk approach based on a common mechanism of toxicity, the Agency has not made a common mechanism of toxicity finding as to iodomethane and any other substances and iodomethane does not appear to produce a toxic metabolite produced by other substances. For the purposes of this action, therefore, the Agency has not assumed that iodomethane has a common mechanism of toxicity with other substances.

ENVIRONMENTAL FATE AND EFFECTS

A. ENVIRONMENAL FATE

The high vapor pressure and low affinity for sorption on soil of iodomethane suggest that volatilization is the most important environmental route of dissipation. Field data from iodomethane applied via broadcast shank injection to a bare-ground plot and covered simultaneously with a standard plastic tarpaulin over the treated plot suggests that 54 to 80

percent of iodomethane dissipated to the atmosphere before the tarpaulin was removed. Once volatilized into the atmosphere, iodomethane degrades rapidly due to direct photolysis and the estimated atmospheric residence time is less than 12 days.

Field dissipation data show that no residual iodomethane was detected at the end of the field study period at any site tested. Even if any iodomethane exposure should occur in the surface water, a low Henry's Law constant suggests rapid volatilization of iodomethane to the atmosphere. Tier II PRZM/EXAMS and Tier I SCIGROW were used to estimate iodomethane concentrations in surface water and ground water, respectively. Based on environmental fate data, the residual contents in soils, and Tier I and II model estimated concentrations, the Agency does not expect iodomethane to adversely affect ground water or surface water. However, since iodomethane is soluble in water, there is the possibility of leaching to ground water if slicing or removal of the tarpaulin coincides with, or is followed soon by, a rain event. Consequently, the Agency is requiring cautionary language on the label prohibiting the slicing or removal of the tarpaulin if it is raining or if rain is expected within 48 hours after treatment.

B. ECOLOGICAL EFFECTS

1. Aquatic Exposure and Risk

The Agency does not consider iodomethane to pose an acute or chronic risk to fish and aquatic invertebrates because of low potential of iodomethane runoff from the tarped post application sites to surface water bodies. The low octanol/water partition coefficient indicates that

iodomethane is not likely to bioconcentrate in tissues of aquatic organisms. Comparing the highest acute aquatic EEC to the acute toxicity value for the most sensitive test species (*D. magna*) produces a maximum risk quotient of 0.0017. This risk quotient is well below the lowest acute aquatic Level-of-Concern (LOC) of 0.05 for endangered species. The Agency also believes that the low Henry's Law Constant of iodomethane suggests that chronic exposures to aquatic invertebrates and fish are not likely to occur.

2. Terrestrial Exposure and Risk

The primary route of exposure of nontarget terrestrial organisms to iodomethane is from inhalation of air residues near the treated sites. Estimated air concentration are the highest on the application day with estimated concentrations ranging from 0.987 ppm at 30 cm above the tarp and up to 0.453 ppm at 80 cm above the tarp. These values are estimated flux values based on cumulative charcoal tube residues collected following an application of 242 lb. a.i./acre.

The avian acute inhalation LC_{50} based on a four-hour exposure of bobwhite quail is 395 ppm which is 400X the peak estimated residues. Therefore, it does not appear that there is a substantial risk of acute lethality to birds, even if they fly above or land on the tarp on the day of application. At the lowest test concentration of 344 ppm, sublethal effects were seen and included ataxia, gasping and rales. Given that a No Effect Level was not obtained, it is not possible to say with certainty that there would be no sublethal effects at the expected maximum exposure levels. However, given that the lowest test level was approximately 350X greater than the expected maximum residues, it is quite possible that there would be no sublethal effects as well. Iodomethane is also a short-lived chemical (direct photolysis, $\leq$ 11.5 days) in the atmosphere; therefore, there is low potential for chronic risk to birds and mammals.

Dispersion and photolysis of iodomethane will likely result in birds and wild mammals being exposed to substantially lower residues and risk than those immediately above the tarp on the day of application. Mammals appear to be less acutely sensitive than birds to iodomethane. The reported mammal acute inhalation LC_{50} is 4.0 mg/L (689 ppm). The inhalation maternal NOAEL in a developmental toxicity study with female New Zealand White rabbits is 10 ppm which is above the acute wild mammal exposure and thus substantial risk is not expected. It is not expected that there would be any major use by wildlife of the soil under the tarp. However, some wildlife (e.g. amphibians) may possibly seek dark, warm, moist areas such as the area under a tarp which might result in a lethal exposure.

Iodomethane is phytotoxic and given the label statement referencing the potential to damage caused by drift to other plants or crops, iodomethane may be hazardous to plants off-site. However, based in part on a prior draft biological opinion from the U.S. Fish and Wildlife Service for tarped uses of methyl bromide, the Agency does not presently have a concern for the proposed tarped uses of iodomethane for endangered species, including endangered plants.

C. GLOBAL WARMING AND OZONE DEPLETION POTENTIAL

Once volatilized, iodomethane degrades rapidly in the lower atmosphere via direct photolysis and lasts in the atmosphere less than twelve days, as compared with two years for methyl bromide. Therefore, iodomethane is unlikely to the reach upper atmosphere to have an impact

upon the ozone layer. The estimated ozone depletion potential (ODP) for iodomethane is 0.029, much lower than the 0.65 for methyl bromide. Iodomethane's ODP of 0.029 also is well below the 0.20 level of Class I ozone depleters specified under Title VI, Section 602 of the Clean Air Act. However, global uncertainty on volatilization rates, residence time in soil, photolytic degradation of iodomethane, and the removal of iodine radicals from the troposphere means that the possibility of detrimental effects of iodomethane on ozone layer and a contribution to global warming can not be excluded entirely.

SUMMARY OF REGISTRATION DECISION

A. CONDITIONS OF REGISTRATION

The registrant has agreed in writing to the following conditions for registration: (1) to provide a training/stewardship program using criteria agreed upon with the Agency; (2) to satisfy any additional data requirements and to add any additional risk mitigation as required by the Agency once the Agency makes a decision for the soil fumigant group and to submit label amendments for each iodomethane product within the same timeframe imposed on other soil fumigant registrants for similar label amendments. In addition, the registration will be time- limited for one year.

B. Risk Mitigation

1. End use products are classified as restricted use.

2. Buffer zones are specified on product labels. The buffer zones provide flexibility based on several factors such as application rate; field size; application method, type of tarp, and soil characterization. The following table provides examples of the required buffer zones:

Application Rate (lb a.i./treated acre)	Size Of Contiguously Treated Area (acres)	Buffer Zone Distance in Feet If HDPE* or LDPE** Tarps are Used
175 (max)	>20 to 40	500
	>10 to 20	300
	>5 to 10	100
	Up to 5	50
131 (75%)	>20 to 40	375
	>10 to 20	225
	>5 to 10	75

	Up to 5	40
88 (50%)	>20 to 40	250
	>10 to 20	150
	>5 to 10	50
	Up to 5	25
44 (25%)	>20 to 40	125
	>10 to 20	75
	>5 to 10	25
	Up to 5	25

*High Density Polyethylene **Low Density Polyethylene

Buffer zone reductions of 10% each are allowed for applications where flat fume fumigation is used, when high barrier films are used, and when the soil has an organic matter content of ≥ 3. The buffer zone for applications utilizing all 3 credits can be reduced by 30%. However, the minimum buffer zone is always 25 ft regardless of credits.

Application sites must be limited to ≤ 40 acres/day, and the buffer zone of the field to be treated cannot overlap the buffer zone of another field treated within the last 48 hours.

3. The certified applicator is responsible for establishing the buffer zone and ensuring that workers or bystanders do not enter the buffer zone for 48 hours following the end of the application. An exception will be allowed for transit through the buffer zone, e.g. < 15 minutes for roads and vehicle passage ways where transit is unavoidable.

4. Currently, all certified applicators are required to maintain records related to their use of restricted use pesticides. In addition, for iodomethane, certified applicators must maintain records that demonstrate the method of buffer zone calculations, buffer zone size, how applications met sensitive site requirements, and how occupied structures were handled.

5. Use within ¼ mile of any occupied sensitive site such as a school, day care facility, nursing home, hospital, prison, or playground is prohibited.

6. Certified applicators must be on site and within the line of sight of the field during application.

7. The registrant is instituting a training/stewardship program for certified applicators. Product labels require that the certified applicator must complete the registrant's training program and be certified by Arysta before using the iodomethane product. Sale of iodomethane will be limited to certified applicators that have completed the registrant's training and certification program.

8. The entry restricted period is five days.

9. Tarp monitors, shovelers, tractor drivers and co-pilots must wear a respirator which meets standards specified by the Occupational Safety and Health Standards Agency

(OSHA). In addition, respirator users must be trained using a program that conforms to OSHA requirements and must be examined by a qualified medical practitioner to ensure physical ability to safely wear a respirator. Tractor drivers and co-pilots will have the option of using a ducted fan/blower in lieu of the respirator.

10. Non-handler entry is prohibited while tarps are being removed.

DATA GAPS

There are no data gaps for iodomethane. The Agency has identified data which, if supplied, could help to further refine the risks and possibly result in reduced buffer zones.

PUBLIC INTEREST FINDING

The registration of a new pesticide ingredient is presumed to be in the public interest if: 1) the pesticide is a replacement for another pesticide that is of concern to the Agency; 2) the pesticide has a use for which a Section 18 emergency exemption has been granted because of the lack of a suitable alternative; or 3) the pesticide is to be used to control a pest of public health significance. If none of the these criteria apply, then it must be shown that: 1) there is a need for the new pesticide that is not being met by currently registered pesticides; 2) the new pesticide is less risky than currently registered pesticides; or 3) the benefits from the new pesticide are greater than those from currently registered pesticides or non-chemical control measures. The Agency believes that registering iodomethane is in the public interest based on the designation of iodomethane as a methyl bromide (MeBr) replacement, agricultural need, and the likely benefits.

Methyl bromide is an odorless, colorless gas used as an agricultural soil and structural fumigant to control a wide variety of pests. However, MeBr has been implicated in the depletion of the stratospheric ozone layer allowing increased amounts of radiation to reach the earth's surface, with potential impact to not only human health and the environment, but to agricultural crops as well. Consequently, the industrialized nations agreed to phase out the use of MeBr, except for certain allowable exemptions. In the United States, the phaseout was finalized on January 1, 2005, except for specific exemptions. Specific exemptions were allowed because alternatives to some MeBr uses that are technically and economically feasible, as well as acceptable from a public health viewpoint, have not yet been identified.

UVB radiation (280 to 320 nanometer range) has been implicated in DNA damage and increased incidence of melanoma type cancers. UVB has also been linked to changes in plant physiology; marine ecosystems (particularly phytoplankton populations); buildup of greenhouse gasses; and weakening of some materials. Increased amounts of UVB are expected to reach the earth’s surface if atmospheric ozone levels decrease. Since the sun’s output of UVB is constant, less ozone will result in less protection from this potential harmful radiation. Research demonstrates that surface UVB levels can double during the annual ozone hole.

In addition to being implicated in malignant melanoma and non-melanoma skin cancers, UVB has also been linked to cataracts in humans. Limited exposure to sunlight is important in

reducing exposure to UVB and its impact on health; however, a reduction in atmospheric ozone levels will increase the amount of UVB and consequent health risks.

Solar UVB radiation affects the early developmental stages of fish, shrimp, crab, amphibians, and other animals, often causing exposed animals to exhibit decreased reproductive capacity and impaired larval development. UVB may have an even more fundamental deleterious affect on marine ecosystems by reducing survival rates in phytoplankton. Phytoplankton forms the foundation of aquatic food webs and is limited to the upper layer of the water column in which there is sufficient sunlight to support their growth.

Although plants have a limited ability to adapt to increased levels of UVB, the radiation can change how nutrients are distributed within the plant and the timing of developmental stages. The potential impact of such UVB-mediated changes on plant ecosystem competition, plant disease, and biogeochemical cycles is largely unknown.

Increases in solar UV radiation could affect terrestrial and aquatic biogeochemical cycles, thus altering both sources and sinks of greenhouse and chemically important trace gases e.g., carbon dioxide (CO2), carbon monoxide (CO), carbonyl sulfide (COS) and possibly other gases, including ozone. These potential changes would contribute to biosphere-atmosphere feedbacks that attenuate or reinforce the atmospheric buildup of these gases.

UVB radiation can also weaken materials such as synthetic polymers, naturally occurring biopolymers, and other materials of commercial interest. Today's materials are somewhat protected from UVB by special additives. However, any increase in solar UVB levels will accelerate their breakdown, thereby limiting the length of time for which they are useful outdoors.

The Agency recognizes the importance of the pesticidal activity of a material like MeBr to the agricultural community, and is committed to assist the agricultural sector with the transition to alternative pest control tools. Iodomethane was proposed for use as an alternative pre-plant fumigant for MeBr in field grown ornamentals, nursery grown strawberries, stone fruits, tree nuts, and conifer trees, and field grown peppers, strawberries, stone fruits, tree nuts, tomatoes, and turf. Iodomethane is short-lived in the lower atmosphere and unlikely to reach the upper atmosphere to deplete the ozone layer.

CONTACT PERSON AT EPA

Mary L. Waller
Fungicide Branch
Registration Division (7505P)
Office of Pesticide Programs
Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Office Location and Telephone Number

One Potomac Yard
2777 Crystal Drive
S7319
Arlington, VA 22202
E-mail: waller.mary@epa.gov
Phone Number: 703 308-9354

DISCLAIMER: The information presented in this Pesticide Fact Sheet is for informational purposes only and may not be used to fulfill data requirements for pesticide registration or reregistration.

Appendix I

GLOSSARY OF TERMS AND ABBREVIATIONS

ADNT	Acute delayed neurotoxicity
a.i.	Active Ingredient
aPAD	Acute Population Adjusted Dose
ARI	Aggregate Risk Index
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
ChE	Cholinesterase
ChEI	Cholinesterase inhibition
cPAD	Chronic Population Adjusted Dose
%CT	Percent crop treated
DAT	Days after treatment
DEEM-FCID	Dietary Exposure Evaluation Model - Food Consumption Intake Database
DNA	Deoxyribonucleic acid
DNT	Developmental neurotoxicity
DIT	Developmental Immunotoxicity
DWLOC	Drinking Water Level of Comparison.
EC	Emulsifiable Concentrate Formulation
EEC	Estimated Environmental Concentration. The estimated pesticide concentration in an environment, such as a terrestrial ecosystem.
EPA	U.S. Environmental Protection Agency
FQPA	Food Quality Protection Act
GLC	Gas Liquid Chromatography
GLN	Guideline Number
LC_{50}	Median Lethal Concentration. A statistically derived concentration of a substance that can be expected to cause death in 50% of test animals. It is usually expressed as the weight of substance per weight or volume of water, air or feed, e.g., mg/l, mg/kg or ppm.
LD_{50}	Median Lethal Dose. A statistically derived single dose that can be expected to cause death in 50% of the test animals when administered by the route indicated (oral, dermal, inhalation). It is expressed as a weight of substance per unit weight of animal, e.g., mg/kg.
LOAEL	Lowest Observed Adverse Effect Level
LOAEC	Lowest Observed Adverse Effect Concentration
LOC	Level of Concern
LOD	Limit of Detection
LOQ	Limit of quantitation
mg/kg/day	Milligram Per Kilogram Per Day
mg/L	Milligrams Per Liter
MOE	Margin of Exposure
MRID	Master Record Identification (number), EPA's system of recording and tracking studies submitted
MTD	Maximum tolerated dose
NA	Not Applicable
NOEC	No Observable Effect Concentration
NOEL	No Observed Effect Level

GLOSSARY OF TERMS AND ABBREVIATIONS

NOAEL	No Observed Adverse Effect Level
NOAEC	No Observed Adverse Effect Concentration
NPDES	National Pollutant Discharge Elimination System
OP	Organophosphate
OPP	EPA Office of Pesticide Programs
OPPTS	EPA Office of Prevention, Pesticides and Toxic Substances
PAD	Population Adjusted Dose
PAG	Pesticide Assessment Guideline
PAM	Pesticide Analytical Method
PHED	Pesticide Handler's Exposure Data
PHI	Preharvest Interval
ppb	Parts Per Billion
PPE	Personal Protective Equipment
ppm	Parts Per Million
PRZM/ EXAMS	Tier II Surface Water Computer Model
RAC	Raw Agriculture Commodity
RBC	Red Blood Cell
RED	Reregistration Eligibility Decision
REI	Restricted Entry Interval
RfD	Reference Dose
SCI-GROW	Tier I Ground Water Computer Model
SF	Safety Factor
TGAI	Technical Grade Active Ingredient
UF	Uncertainty Factor
µg	micrograms
µg/L	Micrograms Per Liter
µL/g	Microliter per gram
USDA	United States Department of Agriculture
WPS	Worker Protection Standard

APPENDIX II - Data Base Supporting the Registration of Iodomethane

MRID	Citation
45593700	Arvesta Corp. (2002) Submission of Residue, Product Chemistry, Toxicity and Environmental Fate Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 26 of 49 Studies.
45593701	Curry, K.; Brookman, D. (2002) Iodomethane Technical: Summary of Scientific Data Supporting Registration: Product Properties: Lab Project Number: TM-425-07. Unpublished study prepared by Technology Sciences Group Inc. 32 p. {OPPTS 830.0000}
45593702	Curry, K.; Brookman, D. (2002) Iodomethane Technical: Product Properties--Group A TM-425 Manufacturing Use Product: Lab Project Number: TM-425-01. Unpublished study prepared by Ricerca, LLC. 100 p. {OPPTS 830.1550, 830.1600, 830.1620, 830.1670, 830.1800, 830.1700, 830.1750}
45593703	Walker, R. (2001) Analysis of TM-425 for % Iodomethane by Gas Chromatography: Lab

	Project Number: TM-0410-00/C. Unpublished study prepared by Ricerca, LLC. 11 p. {OPPTS 830.1800}
45593704	Curry, K.; Brookman, D. (2002) Iodomethane Technical: Product Properties--Group B TM-425 Manufacturing Use Product: Lab Project Number: TM-425-02. Unpublished study prepared by Technology Sciences Group Inc. 183 p. {OPPTS 830.6302, 830.6303, 830.6304, 830.6313, 830.6314, 830.6315, 830.6316, 830.6317, 830.6319, 830.6320, 830.6321, 830.7000, 830.7050, 830.7100, 830.7200, 830.7220, 830.7300, 830.7370, 830.7550, 830.7560, 830.7570, 830.7840, 830.7950}
45593705	Wujcik, C. (2001) A Hydrolysis Study of (Carbon 14) Iodomethane (TM-425) in Water: Lab Project Number: 012522-1: 012522. Unpublished study prepared by Ricerca, LLC. 113 p.
45593706	McFadden, J. (2001) A Photolysis Study of (Carbon 14) Iodomethane (TM-425) in Water: Lab Project Number: 012521-1: 012521. Unpublished study prepared by Ricerca, LLC. 95 p.
45593707	Wujcik, C. (2001) Aerobic Soil Metabolism (Carbon 14) Iodomethane (TM-425): Lab Project Number: 012520-1: 012520. Unpublished study prepared by Ricerca, LLC. 97 p.
45593708	Wujcik, C. (2001) Anaerobic Aquatic Metabolism (Carbon 14) Iodomethane (TM-425): Lab Project Number: 013072-1: 013072. Unpublished study prepared by Ricerca, LLC. 105 p.
45593709	McFadden, J.; Landphair, C. (2001) Adsorption and Desorption of (Carbon 14) Iodomethane (TM-425) on Five Soils: Lab Project Number: 013136-1: 013136. Unpublished study prepared by Ricerca, LLC. 118 p.
45593710	Baker, F.; Estigoy, L.; Reiss, R. et al. (2002) Volatility of (Carbon 14) Iodomethane (TM-425) Under Field Conditions in California and Florida: Lab Project Number: 893W: 893W-1: 893W-FL. Unpublished study prepared by Plant Sciences, Inc. 929 p.
45593711	Baker, F.; Nelson, M.; Bolda, M. et al. (2002) Terrestrial Field Dissipation Iodomethane (TM-425) in California and Florida Bareground Soils: Final Report: Lab Project Number: 892W: 892W-1: MEIUSATD2000-03. Unpublished study prepared by Plant Sciences, Inc. 933 p.
45593712	Anonymous (2000) Estimates of the Atmospheric Lifetime, Global Warming Potential, and Ozone Depletion Potential of Iodomethane (CH3I). Unpublished study prepared by Atmospheric and Environmental Research, Inc. 40 p.
45593713	Drottar, K.; Kendall, T.; Krueger, H. (2001) Iodomethane (TM-425): A 48-Hour Static-Renewal Acute Immobilisation Test with the Cladoceran (Daphnia magna): Final Report: Lab Project Number: 443A-106. Unpublished study prepared by Wildlife International, Ltd. 57 p. {OPPTS 850.1010}
45593714	Drottar, K.; Kendall, T.; Krueger, H. (2002) Iodomethane (TM-425): A 96-Hour Static-Renewal Acute Toxicity Test with the Rainbow Trout (Oncorhynchus mykiss): Final Report: Lab Project Number: 443A-107A. Unpublished study prepared by Wildlife International, Ltd. 65 p. {OPPTS 850.1075}
45593715	Nixon, W.; Kendall, T. (2001) Analytical Method Verification for the Determination of Iodomethane in Freshwater: Lab Project Number: 443C-107. Unpublished study prepared by Wildlife International, Ltd. 31 p. {OPPTS 830.1800}
45593716	Gallagher, S.; Beavers, J. (2001) Iodomethane: An Acute Oral Toxicity Study with the Northern Bobwhite Quail: Final Report: Lab Project Number: 443-101. Unpublished study prepared by Wildlife International, Ltd. 48 p. {OPPTS 850.2100}
45593717	Kiplinger, G. (2002) Acute Inhalation Toxicity Study of Iodomethane in Bobwhite Quail: Final Report: Lab Project Number: WIL-418005. Unpublished study prepared by WIL Research Laboratories, Inc. 184 p.

45593718	McFadden, J. (2002) Metabolism of (Carbon 14)-Iodomethane (TM-425) in Strawberries: Lab Project Number: 012033-1: 012033. Unpublished study prepared by Ricerca, LLC. 138 p. {OPPTS 860.1300}
45593719	McFadden, J. (2002) Metabolism of (Carbon 14)-Iodomethane (TM-425) by Tomato: Amended Report: Lab Project Number: 012391-1-1: 012391. Unpublished study prepared by Ricerca, LLC. 117 p. {OPPTS 860.1300}
45593720	Cassidy, P. (2001) GLP Method Validation Determination of Iodomethane (TM-425) by Gas Chromatography Headspace Analysis: Lab Project Number: 012157-1: 012157-0-1: 916. Unpublished study prepared by Ricerca, LLC. 55 p. {OPPTS 860.1340 and 860.1380}
45593721	Cassidy, P. (2002) Analytical Method: Determination of Iodomethane in Tomato Fruit by Headspace Analysis using Gas Chromatography: Lab Project Number: 012157-3. Unpublished study prepared by Ricerca, LLC. 25 p. {OPPTS 860.1340}
45593722	Cassidy, P. (2001) Analytical Method: Determination of Iodide in Tomato Fruit by Ion Chromatography: Lab Project Number: 012157-2. Unpublished study prepared by Ricerca, LLC. 25 p. {OPPTS 860.1340}
45593723	Cassidy, P. (2001) GLP Method Validation Determination of Iodomethane (TM-425) by Gas Chromatography Headspace Analysis and Iodide by Ion Chromatography in Strawberries: Lab Project Number: 012953-1: TM-425: 012953-0. Unpublished study prepared by Ricerca, LLC. 50 p. {OPPTS 860.1340 and 860.1380}
45593724	Cassidy, P. (2002) Analytical Method: Determination of Iodomethane in Strawberry Fruit by Headspace Analysis using Gas Chromatography: Lab Project Number: 012953-3. Unpublished study prepared by Ricerca, LLC. 25 p.
45593725	Cassidy, P. (2002) Analytical Method: Determination of Iodide in Strawberry Fruit by Ion Chromatography: Lab Project Number: 012953-2. Unpublished study prepared by Ricerca, LLC. 26 p. {OPPTS 860.1340}
45593726	Cassidy, P. (2002) Magnitude of the Residue of Iodomethane (TM-425) and Iodide in Tomato Raw Agricultural Commodity: Lab Project Number: 012921-1-1: TOM425TOM: 425USATOM00.069X. Unpublished study prepared by Ricerca, LLC. 103 p. {OPPTS 860.1500}
45593800	Arvesta Corporation (2002) Submission of Residue, Toxicity, Environmental Fate, Risk, Exposure Assessment and Efficacy Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 23 of 49 Studies.
45593801	Cassidy, P.; Hurstak, R.; Obrist, J. (2002) Magnitude of the Residue of Iodomethane (TM-425) and Iodide in Strawberry Raw Agricultural Commodity: Lab Project Number: TOM425STR: 013011-1: 17001. Unpublished study prepared by Pacific Ag Research Corp. and Ricerca, LLC. 102 p. {OPPTS 860.1500}
45593802	Burin, G.; Mileson, B. (2002) Iodomethane Technical: Summary of Scientific Data Supporting Registration: Health Effects: Lab Project Number: TM-425-21. Unpublished study prepared by Technology Sciences Group, Inc. 221 p. {OPPTS 835.0000}
45593803	Bonnette, K. (2001) An Acute Oral Toxicity Study in Rats with Iodomethane (TM-425): Amended Final Report: Lab Project Number: 3527.1. Unpublished study prepared by Springborn Laboratories, Inc. 95 p. {OPPTS 870.1100}
45593804	Bonnette, K. (2001) An Acute Oral Toxicity Study in Mice with Iodomethane (TM-425): Amended Final Report: Lab Project Number: 3527.2. Unpublished study prepared by Springborn Laboratories, Inc. 96 p. {OPPTS 870.1100}
45593805	Bonnette, K. (2001) An Acute Dermal Toxicity Study in Rabbits with Iodomethane (TM-425):

	Amended Final Report: Lab Project Number: 3527.3. Unpublished study prepared by Springborn Laboratories, Inc. 66 p. {OPPTS 870.1200}
45593806	Kirkpatrick, D. (2001) Acute Inhalation Toxicity Study of Iodomethane in Albino Rats: Final Report: Lab Project Number: WIL-418006. Unpublished study prepared by WIL Research Laboratories, Inc. 124 p. {OPPTS 870.1300}
45593807	Bonnette, K. (2001) A Primary Eye Irritation Study in Rabbits with Iodomethane (TM-425): Amended Final Report: Lab Project Number: 3527.5. Unpublished study prepared by Springborn Laboratories, Inc. 55 p. {OPPTS 870.2400}
45593808	Bonnette, K. (2001) A Primary Skin Irritation Study in Rabbits with Iodomethane (TM-425): Amended Final Report: Lab Project Number: 3527.6. Unpublished study prepared by Springborn Laboratories, Inc. 66 p. {OPPTS 870.2500}
45593809	Bonnette, K. (2001) A Dermal Sensitization Study in Guinea Pigs with Iodomethane (TM-425): Maximization Design: Amended Final Report: Lab Project Number: 3527.7. Unpublished study prepared by Springborn Laboratories, Inc. 84 p. {OPPTS 870.2600}
45593810	Kirkpatrick, D. (2002) A 13-Week Inhalation Toxicity Study (With a Four-Week Interim Necropsy) of Iodomethane in Albino Rats: Final Report: Lab Project Number: WIL-418015. Unpublished study prepared by WIL Research Laboratories, Inc. 829 p. {OPPTS 870.3465}
45593811	Nemec, M. (2002) An Inhalation Prenatal Developmental Toxicity Study of Iodomethane in Rabbits: Final Report: Lab Project Number: WIL-418002. Unpublished study prepared by WIL Research Laboratories, Inc. 375 p. {OPPTS 870.3700}
45593812	Nemec, M. (2002) An Inhalation Prenatal Developmental Toxicity Study of Iodomethane in Rats: Final Report: Lab Project Number: WIL-418010. Unpublished study prepared by WIL Research Laboratories, Inc. 288 p. {OPPTS 870.3700}
45593813	Wagner, V.; Dakoulas, E. (2001) Bacterial Reverse Mutation Assay (Ames) with Iodomethane: Final Report: Lab Project Number: AA38UL.504004.BTL: SPGT504004. Unpublished study prepared by BioReliance. 59 p.
45593814	Gudi, R.; Brown, C. (2001) In Vitro Mammalian Chromosome Aberration Test with Iodomethane: Final Report: Lab Project Number: AA38UL.331.BTL. Unpublished study prepared by BioReliance. 41 p.
45593815	San, R.; Clarke, J. (2001) In Vitro Mammalian Cell Gene Mutation Test (CHO/HGPRT Assay) with Iodomethane: Lab Project Number: AA38UL.782.BTL. Unpublished study prepared by BioReliance. 28 p.
45593816	Gudi, R.; Krsmanovic, L. (2001) Mammalian Erythrocyte Micronucleus Test with Iodomethane: Final Report: Lab Project Number: AA38UL.123.BTL. Unpublished study prepared by BioReliance. 34 p.
45593817	Schaefer, G. (2002) An Acute Neurotoxicity Study of Iodomethane in Rats: Final Report: Lab Project Number: WIL-418008. Unpublished study prepared by WIL Research Laboratories, Inc. 1017 p. {OPPTS 870.6200}
45593818	Sved, D. (2002) A Comparative Oral (Gavage) and Inhalation Metabolism and Toxicokinetic Study with Iodomethane in Male Rats: Interim Report: Lab Project Number: WIL-418007. Unpublished study prepared by WIL Research Laboratories, Inc. 284 p. {OPPTS 870.7485, 870.8340}
45593819	Lawyer, A.; Mileson, B. (2002) Iodomethane Technical: Summary of Scientific Data Supporting Registration: Occupational and Residential Exposure: Lab Project Number: TM-425-32. Unpublished study prepared by Technology Sciences Group, Inc. 56 p. {OPPTS 875.0000}

45593820	Baker, F.; Estigoy, L.; Belcher, T. (2002) Worker and Applicator Exposure Under Field Conditions During Application of the Fumigant Iodomethane (TM-425): Lab Project Number: 974W: 974W-1. Unpublished study prepared by PTRL West, Inc., Excel Research Services, Inc. and Bolsa Research Associates, Inc. 318 p. {OPPTS 875.1300}
45593821	Baker, F.; Arndt, T.; Estigoy, L. et al. (2002) Method Validation for Iodomethane Trapping, Field Stability and Storage Stability on Worker Exposure Sample Media: Lab Project Number: 983W: 983W-1. Unpublished study prepared by PTRL West, Inc. 91 p. {OPPTS 875.1300}
45593822	Baker, F.; Estigoy, L.; Gillis, M. (2002) Environmental (Off-Site) Monitoring and Direct Flux/Indirect Flux Determination of Iodomethane (TM-425) under Field Conditions: Lab Project Number: 975W: 975W-1. Unpublished study prepared by PTRL West, Inc., Excel Research Services, Inc. and Bolsa Research Associates, Inc. 684 p.
45593823	Gorder, G.; Lawyer, A. (2002) Iodomethane Technical: Summary of Scientific Data Supporting Registration: Product Performance: Lab Project Number: TM-425-31. Unpublished study prepared by Technology Sciences Group, Inc. 39 p. {OPPTS 810.0000}
45641400	Arvesta Corp. (2002) Submission of Toxicity Data in Support of the Application for Registration of TM-425. Transmittal of 1 Study.
45641401	Sved, D. (2002) A Comparative Oral (Gavage) and Inhalation Metabolism and Toxicokinetic Study with Iodomethane in Male Rats: Final Report: Lab Project Number: WIL-418007. Unpublished study prepared by WIL Research Laboratories, Inc. 337 p. {OPPTS 870.7485 and 870.8340}
45710300	Arvest Corp. (2002) Submission of Toxicity Data in Support of the Application for Registration of TM-425. Transmittal of 1 Study.
45710301	Nemec, M. (2002) An Inhalation Two-Generation Reproductive Toxicity Study of Iodomethane in Rats: Comprehensive Final Report: Lab Project Number: WIL-418004: WIL-418004F: WIL-418004M. Unpublished study prepared by WIL Research Laboratories, Inc. 3208 p. {OPPTS 870.3800}
45796200	Arvesta Corporation (2002) Submission of Toxicity Data in Support of the Application for Registration of TM-425. Transmittal of 2 Studies.
45796201	Kirkpatrick, D. (2002) Acute Inhalation Toxicity Study of Idomethane (sic) in Albino Rats: Lab Project Number: WIL-418006. Unpublished study prepared by Wil Research Laboratories, Inc. 28 p. {OPPTS 870.1300}
45796202	Schaefer, G. (2002) An Acute Neurotoxicity Study of Iodomethane in Rats: Lab Project Number: WIL-418008. Unpublished study prepared by Wil Research Laboratories, Inc. 49 p. {OPPTS 870.6200}
45879100	Arvesta Corporation (2003) Submission of Environmental Fate and Exposure Data in Support of the Applications for Registration of Iodomethane Technical, TM-42501, and TM-42503. Transmittal of 2 Studies.
45879101	Baker, F.; Estigoy, L.; Belcher, T. (2003) Environmental (Off-Site) Monitoring and Indirect Flux Determination of Iodomethane (TM-425) Under Field Conditions: Lab Project Number: 1142W: 1142W-1: ERS22087. Unpublished study prepared by PTRL West, Inc., Excel Research Services, Inc., and Pacific Ag Group. 538 p.
45879102	Baker, F.; Hiler, R.; Belcher, T. (2003) Worker and Applicator Exposure Under Field Conditions During Tarped/Raised Bed/Shank Injection Application of the Fumigant Iodomethane (TM-425): Final Report: Lab Project Number: 1140W: 1140W-1: ERS22086. Unpublished study prepared by PTRL West, Inc., Excel Research Services, Inc., and Pacific Ag Group. 312 p. {OPPTS 875.1300}

45939500	Arvesta Corporation (2003) Submission of Exposure Data in Support of the Registrations of Iodomethane Technical, TM-42501, and TM-42503. Transmittal of 1 Study.
45939501	3M Corporation (2003) Characterization of Efficiency of 3M Respirator Cartridge 3M 60928 in Removal of Iodomethane From Air. Unpublished study prepared by Technology Sciences Group, Inc. 14 p. {OPPTS 875.1300}
46077000	Arvesta Corporation (2003) Submission of Toxicity Data in Support of the Applications for Registration of TM-425, TM 42501 and TM 42503. Transmittal of 1 Study.
46077001	Nemec, M. (2003) A Phased-Exposure Prenatal Developmental Toxicity Study of Iodomethane in Rabbits: Final Report. Project Number: WIL/418023. Unpublished study prepared by WIL Research Laboratories, Inc. 655 p.
46086300	Arvesta Corporation (2003) Submission of Toxicity Data in Support of the Applications for Registration of TM-425, TM-42501 and TM-42503. Transmittal of 2 Studies.
46086301	Harriman, J. (2002) A 90-Day Oral (Capsule) Toxicity Study of Iodomethane in Dogs: Final Report. Project Number: WIL/418017. Unpublished study prepared by WIL Research Laboratories, Inc. 894 p.
46086302	Harriman, J. (2003) A 90-Day Dietary Toxicity Study of Microencapsulated Iodomethane in Mice: Final Report. Project Number: WIL/418021. Unpublished study prepared by WIL Research Laboratories, Inc. 657 p.
46175700	Arvesta Corporation (2003) Submission of Environmental Fate Data in Support of the Application for Registration of Iodomethane. Transmittal of 1 Study.
46175701	Reiss, R. (2003) An Analysis of the California Department of Pesticide Regulation's Methods for Estimating Buffer Zones For Fumigants and Recommendations for Refining the Method for Iodomethane: Arvesta Iodomethane (TM-425). Unpublished study prepared by Sciences International, Inc. 42 p.
46203700	Arvesta Corporation (2004) Submission of Product Chemistry, Environmental Fate, Exposure and Toxicity Data in Support of the Applications for Registration of Iodomethane Technical, TM-42501 and TM-42503. Transmittal of 8 Studies.
46203701	Baker, F.; Estigoy, L.; Belcher, T. (2003) Environmental (Off-Site) Monitoring and Indirect Flux Determination of Iodomethane (TM-425) Under Field Conditions Following Tarped/Raised Bed/Drip Irrigation Application. Project Number: 1198W, 1198W/1, AR23006. Unpublished study prepared by PTRL West, Inc., Sciences International, Inc. and Pacific Agricultural Research Corp. 566 p.
46203702	Baker, F.; Hiler, R.; Belcher, T. (2003) Worker and Applicator Exposure Under Feld Conditions During Drip Irrigation Application of the Fumigant Iodomethane (TM-425). Project Number: 1197W, 1197W/1, AR23005. Unpublished study prepared by PTRL West, Inc., Agvise Inc. and Pacific Agricultural Research Corp. 272 p.
46203704	Harriman, J. (2003) A 21-Day Dietary Range-Finding Study of Microencapsulated Iodomethane in Mice: Final Report. Project Number: WIL/418020. Unpublished study prepared by WIL Research Laboratories, Inc. 277 p.
46203705	Harriman, J. (2004) A 12-Month Oral (Capsule) Toxicity Study of Iodomethane in Dogs: Final Report. Project Number: WIL/418018. Unpublished study prepared by WIL Research Laboratories, Inc. 1455 p.
46203706	Mertens, J. (2002) A 3-Week Capsule Dose Range-Finding Study of Iodomethane in Dogs: Final Report. Project Number: WIL/418016. Unpublished study prepared by WIL Research Laboratories, Inc. 271 p.

46203707	Kirkpatrick, D. (2003) A 24-Month Inhalation Combined Chronic Toxicity/Carcinogenicity Study of Iodomethane in Rats: Final Report. Project Number: WIL/418019. Unpublished study prepared by WIL Research Laboratories, Inc. 1812 p.
46203708	Stetson, P. (2003) Stability Assessment of Microencapsulated Iodomethane in Certified Rodent Labdiet 5002 Admixes: Final Report. Project Number: WIL/418014. Unpublished study prepared by WIL Research Laboratories, Inc. 193 p.
46203710	Nemec, M. (2003) An Inhalation Two-Generation Reproductive Toxicity Study of Iodomethane in Rats: Amended Final Report. Project Number: WIL/418004. Unpublished study prepared by WIL Research Laboratories, Inc. 61 p.
46239700	Arvesta Corporation (2004) Submission of Toxicity Data in Support of the Application for Registrations of TM-425, TM-42501 and TM-42503. Transmittal of 2 Studies.
46239701	Harriman, J. (2003) A 90-Day Dietary Toxicity Study On Microencapsulated Iodomethane in Mice. Project Number: WIL/418022. Unpublished study prepared by WIL Research Laboratories, Inc. 657 p.
46239702	Harriman, J. (2003) A Single Dose Comparative Toxicity Study of Microencapsulated Versus Non-Microencapsulated Iodomethane in Rats: Final Report. Project Number: WIL/418022. Unpublished study prepared by WIL Research Laboratories, Inc. 162 p.
46332700	Arvesta Corporation (2004) Submission of Environmental Fate Data in Support of the Application for Registrations of TM-425, TM-42501, and TM-42503. Transmittal of 2 Studies.
46332701	McFadden, J. (2004) A Photolysis Study of [14-Carbon] Iodomethane (TM-425) in Water. Project Number: 012521/1, 012521. Unpublished study prepared by Ricerca Biosciences, LLC. 70 p.
46332702	McFadden, J.; Landphair, C. (2004) Adsorption and Desorption of [14-Carbon] Iodomethane (TM-425) on Five Soils. Project Number: 013136/1, 013136. Unpublished study prepared by Ricerca Biosciences, LLC. 60 p.
46385200	Arvesta Corp. (2004) Submission of Environmental Fate, Exposure and Risk Data in Support of the Application for Registration of Iodomethane. Transmittal of 4 Studies.
46385201	Baker, F.; Hiler, R.; Estigoy, L.; et. al. (2004) Environmental (Off-Site) Monitoring and Indirect Flux Determination of Iodomethane (TM-425) Under Field Conditions Following Tarped/Raised Bed/Drip Irrigation Method: Final Report. Project Number: 1256W, 1256W/1, AR24002. Unpublished study prepared by PTRL West, Inc., Access Research, Consulting, Inc. and Pacific Agri. Labs. 592 p.
46385202	Baker, F.; Estigoy, L.; Belcher, T. (2004) Environmental (Off-Site) Monitoring and Indirect Flux Determination of Iodomethane (TM-425) Under Field Conditions Following Tarped/Raised Bed/Shallow Shank Injection Application. Project Number: 1254W, 1254W/1, AR24004. Unpublished study prepared by PTRL West, Inc., Access Research and Consulting, Inc. and Pacific Agricultural Research Corp. 591 p.
46385203	Baker, F.; Hiler, R.; Belcher, T. (2004) Worker and Applicator Exposure Under Field Conditions During Tarped/Raised Bed/Drip Irrigation Application of the Fumigant Iodomethane (TM-425). Project Number: 1255W, 1255W/1, AR42001. Unpublished study prepared by PTRL West, Inc., Access Research and Consulting, Inc., and Pacific Agricultural Research Corp. 306 p.
46385204	Baker, F.; Hiler, R.; Belcher, T. (2004) Worker and Applicator Exposure Under Field Conditions During Tarped/Raised Bed/Shallow Shank Injection Application of the Fumigant Iodomethane (TM-425). Project Number: 1253W, 1253W/1, AR24003. Unpublished study prepared by PTRL West, Inc., Access Research and Consulting, Inc. and Pacific Agricultural Research Corp. 310 p.

46408800	Arvesta Corp. (2004) Submission of Product Chemistry, Fate, Exposure and Risk Data in Support of the Application for Registration of Iodomethane and Midas. Transmittal of 9 Studies.
46408801	Sweeney, L.; Kirman, C.; Gargas, M. (2004) Derivation of Human Toxicity Reference Values for Methyl Iodide using Physiologically Based Pharmacokinetic (PBPK) Modeling. Project Number: 34501. Unpublished study prepared by Sapphire Group, Inc. 91 p.
46408802	Mileson, B. (2004) Iodomethane Human Health Risk Assessment. Project Number: 810/01. Unpublished study prepared by Technology Sciences Group, Inc. 161 p.
46408803	Reiss, R.; Griffin, J. (2004) A Bystander Risk Assessment Following Applications of Iodomethane. Project Number: 2004/01. Unpublished study prepared by Sciences International, Inc. 68 p.
46408804	Thrall, K.; Woodstock, A.; Soelberg, J.; et. al. (2004) Uptake of MeI by the Rabbit Nasal Cavity: Final Report. Project Number: 47542. Unpublished study prepared by Battelle-Pacific Northwest Div. 23 p.
46408805	Thrall, K.; Woodstock, A.; Soelberg, J.; et. al. (2004) Uptake of MeI by the Rat Nasal Cavity: Final Report. Project Number: 47542. Unpublished study prepared by Battelle-Pacific Northwest Div. 18 p.
46408806	Thrall, K.; Woodstock, A.; Soelberg, J.; et. al. (2004) In Vivo Gas Uptake in Rabbits: Methyl Iodide: Final Report. Project Number: 47542. Unpublished study prepared by Battelle-Pacific Northwest Div. 19 p.
46408807	Corley, R.; Minard, K.; Trease, L.; et. al. (2004) Magnetic Resonance Imaging and Computational Fluid Dynamics Simulations of Rabbit Nasal Airflows: Methyl Iodide: Final Report. Project Number: 47542. Unpublished study prepared by Battelle-Pacific Northwest Div. 18 p.
46408808	Morris, J.; Sasser, L.; Creim, J.; et. al. (2004) The Pharmacokinetics of Sodium Iodide (NaI) in Pregnant Rabbits: Final Report. Project Number: 47542. Unpublished study prepared by Battelle-Pacific Northwest Div. 43 p.
46408809	Poet, T.; Wu, H. (2004) In vitro GSH Conjugation STudy in Rat, Rabbit, and Human Blood and Tissues with Methyl Iodide: Final Report. Project Number: 47542. Unpublished study prepared by Battelle-Pacific Northwest Div. 36 p.
46412900	Arvesta Corporation (2004) Submission of Environmental Fate Data in Support of the Application for Registration of Iodomethane. Transmittal of 1 Study.
46412901	Baker, F.; Estigoy, L.; Belcher, T. (2004) Environmental (Off-Site) Monitoring and Indirect Flux Determination of Iodomethane (TM-425) Under Field Conditions Following Tarped/Raised Bed/Drip Irrigation Application. Project Number: 1198W, 1198W/1. Unpublished study prepared by PTRL West, Inc., Access Research and Consulting, Inc. and Sciences International, Inc. 568 p.
46416200	Arvesta Corp. (2004) Submission of Toxicity Data in Support of the Registrations of Iodomethane Technical, TM-42501 and TM-42503. Transmittal of 1 Study.
46416201	Sweeney, L.; Kirman, C.; Gargas, M. (2004) Derivation of Human Toxicity Reference Values for Methyl Iodide using Physiologically Based Pharmacokinetic (PBPK) Modeling Computer: Computer Code for the Model. Project Number: 34501. Unpublished study prepared by Sapphire Group, Inc. 90 p.
46441300	Arvesta Corporation (2005) Submission of Toxicity Data in Support of the Application for Registrations of Iodomethane Technical, TM-42501, and TM-42503. Transmittal of 4 Studies.

46441301	Himmelstein, M. (2004) Iodomethane: In Vivo 2-Day Inhalation Mechanistic Toxicity Study in the Rat. Project Number: DUPONT/14998, 15298, 1389. Unpublished study prepared by E. I. Du Pont De Nemours and Co., Inc. and Exygen Research and University of Massachusetts Medical. 463 p.
46441302	DeLorme, M. (2004) Iodomethane: Pulmonary Function Study in the Rabbit. Project Number: DUPONT/15453, 15298, 707. Unpublished study prepared by E. I. Du Pont De Nemours and Co., Inc. and Exygen Research. 129 p.
46441303	Gannon, S. (2004) Iodomethane: In Vitro Partition Coefficients in Rat and Rabbit Tissues and Human Blood. Project Number: DUPONT/15617, 15298, 1388. Unpublished study prepared by E. I. Du Pont De Nemours and Co., Inc. 47 p.
46441304	Farwell, A. (2004) Effect of TM-425 (Methyl iodide) on Deiodinase Activity: Final Report. Project Number: DEIODINASE/1234. Unpublished study prepared by University of Massachusetts Medical. 36 p.
46446900	Arvesta Corp. (2005) Submission of Toxicity, Exposure and Risk Data in Support of the Application for Registrations of TM-42501, TM-42503 and Iodomethane Technical. Transmittal of 3 Studies.
46446901	Sweeney, L.; Kirman, C.; Gargas, M. (2005) Derivation of Human Toxicity Reference Values for Methyl Iodide Using Physiologically Based Pharmacokinetic (PBPK) Modeling (Revised Report). Project Number: 34501. Unpublished study prepared by Sapphire Group, Inc. 103 p.
46446902	Reiss, R.; Griffin, J. (2005) A Bystander Risk Assessment Following Applications of Iodomethane Revised. Project Number: 2005/01. Unpublished study prepared by Sciences International, Inc. 72 p.
46446903	Mileson, B. (2005) Iodomethane Human Health Risk Assessment Revised. Project Number: 810/02. Unpublished study prepared by Technology Sciences Group, Inc. 162 p.
46451000	Arvesta Corporation (2005) Submission of Toxicity Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 2 Studies.
46451001	Sloter, E. (2005) A Combined Baseline/Inhalation Exposure Study of Iodomethane-Related Fetotoxicity in Rabbits: Final Report. Project Number: WIL/418031, WIL/418031H, WIL/418031I. Unpublished study prepared by WIL Research Laboratories, Inc., E. I. du Pont de Nemours and Company Inc. and Exygen Research. 1631 p.
46451002	Sloter, E. (2005) Mode of Action Study for Iodomethane-Related Fetotoxicity in Rabbits: Final Report. Project Number: WIL/418032, DUPONT/15855, P0000903. Unpublished study prepared by WIL Research Laboratories, Inc. and E. I. du Pont de Nemours and Company Inc. and Exygen Research. 911 p.
46463600	Arvesta Corporation (2005) Submission of Environmental Fate, Exposure and Risk Data in Support of the Application for Registration of Iodomethane. Transmittal of 2 Studies.
46463601	Baker, F.; Estigoy, L.; Hiler, R.; et al. (2005) Environmental (Off-Site) Monitoring and Indirect Flux Determination of Iodomethane (TM-425) Under Field Conditions Following Tarped/Raised Bed/Drip Irrigation Application. Project Number: 1315W, 1315W/1. Unpublished study prepared by PTRL West, Inc. and Access Research and Consulting, Inc. and Pacific Agricultural Research Corp. 627 p.
46463602	Baker, F.; Hiler, R.; Lange, B. (2005) Worker and Applicator Exposure Under Field Conditions During Tarped/Raised Bed/Drip Irrigation Application of the Fumigant Iodomethane (TM-425). Project Number: 1314W, 1314W/1. Unpublished study prepared by PTRL West, Inc., Access Research and Consulting, Inc. and Pacific Agricultural Research Corp. 319 p.
46512400	Arvesta Corporation (2005) Submission of Toxicity, Exposure and Risk Data in Support of the

	Application for Registration of Iodomethane Technical. Transmittal of 2 Studies.
46512401	Kirkpatrick, D. (2005) A 24-Month Inhalation Combined Chronic Toxicity/Carcinogenicity Study of Iodomethane in Rats: Final Report. Project Number: WIL/418019, 418019, WIL/418019M. Unpublished study prepared by WIL Research Laboratories, Inc. 4817 p.
46512402	Mileson, B.; Sweeney, L.; Kirman, C. (2005) Risk Assessment of Thyroid Follicular Cell Tumors in Rats Following 2-Year Iodomethane Exposure by Inhalation. Project Number: 810/03. Unpublished study prepared by Technology Sciences Group, Inc. and Universitaet Dortmund and Institute of Environmental Toxicology. 114 p.
46545200	Arvesta Corporation (2005) Submission of Toxicity Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
46545201	Sweeney, L.; Gargas, M. (2005) Data and References to Support the Derivation of Human Toxicity Reference Values for Methyl Iodide Using Physiologically Based Pharmokinetic (PBPK) Modeling. Project Number: 34503. Unpublished study prepared by Sapphire Group, Inc. 154 p.
46559300	Arvesta Corp. (2005) Submission of Fate Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 3 Studies.
46559301	Sweeney, L.; Gargas, M. (2005) Age Specific HEC's for Potential Nasal Effects of MeI in Children: Supplement to (PBPK) Modeling (MRID 46446901). Project Number: 34503. Unpublished study prepared by Sapphire Group, Inc. 46 p.
46559302	Sweeney, L. (2004) Revision of HEC for Nasal Effects of Methyl Iodide (MeI): Supplement to (PBPK) Modeling (MRID 46408801). Project Number: 45603. Unpublished study prepared by Sapphire Group, Inc. 68 p.
46559303	Sweeney, L.; Gargas, M. (2005) Supplemental Information Regarding Human Fetal and Maternal Iodide AUC Sensitivity and a Rabbit Model Sensitivity Analysis: Supplement to (PBPK) Modeling (MRID 46446901). Project Number: 45603. Unpublished study prepared by Sapphire Group, Inc. 65 p.
46570400	Arvesta Corporation (2005) Submission of Toxicity Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
46570401	Harriman, J.; Armstrong, A. (2005) A 12-Month Oral (Capsule) Toxicity Study of Iodomethane in Dogs: Evaluation of Injected Sclera in Dogs Exposed to Iodomethane for 12 Months From Study WIL-418018. Project Number: WIL/418018. Unpublished study prepared by WIL Research Laboratories, Inc. 8 p.
46582800	Arvesta Corp. (2005) Submission of Toxicity Data in Support of FIFRA 6(a)(2) Data Requirements for Iodomethane Technical. Transmittal of 2 Studies.
46582801	Harriman, J. (2005) An 18 Month Dietary Carcinogenicity Study of Microencapsulated Iodomethane in Mice: Final Report. Project Number: WIL/418025. Unpublished study prepared by WIL Research Laboratories, Inc. 3071 p.
46582802	Hardisty, J. (2005) A Pathology Working Group (PWG) Peer Review of Proliferative Lesions Reported in the Uterus and Cervix: Microencapsulated Iodomethane: Mice. Project Number: 758/011. Unpublished study prepared by Experimental Pathology Laboratories, Inc. 181 p.
46593800	Arysta LifeScience Corporation (2005) Submission of Fate Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
46593801	Gargas, M.; Sweeney, L.; Kirman, C. (2005) Weight of Evidence for Evaluation of the HEC for Acute Developmental Toxicity of Methyl Iodide. Project Number: 34501. Unpublished study prepared by Sapphire Group, Inc. 274 p.

46601700	Arysta LifeScience North America Corporation (2005) Submission of Toxicity Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
46601701	Mileson, B.; McDonald, T. (2005) Review of Iodomethane Mutagenicity Studies. Project Number: 34505. Unpublished study prepared by Arysta LifeScience North America Corporation and Technology Services Group, Inc. 329 p.
46610900	Arysta LifeScience North America Corporation (2005) Submission of Exposure and Risk Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
46610901	Sweeney, L.; Mileson, B. (2005) Application of PBPK Modeling of Iodomethane in Rat Cancer Risk Assessment. Project Number: 34502. Unpublished study prepared by Sapphire Group, Inc. 47 p.
46623400	Arysta Life Science North America Corp. (2005) Submission of Toxicity Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
46623401	Kurume Laboratory (2003) A 96-Hour Acute Toxicity Test of Iodomethane with Common Carp: (Final Report). Project Number: TMN/012, 92548, E01/2548E. Unpublished study prepared by Chemicals Evaluation and Research Institute. 32 p.
46631400	Arysta LifeScience North America Corporation (2005) Submission of Toxicity Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
46631401	Sweeney, L.; Gargas, M. (2005) Revaluation of the HEC for Acute Nasal Toxicity of Methyl Iodide. Project Number: 34510. Unpublished study prepared by Sapphire Group, Inc. 417 p.
46634200	Arysta LifeScience North America (2005) Submission of Product Chemistry Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
46634201	Walker, R. (2002) TM-425-Storage Stability/Corrosion. Project Number: 013124/1. Unpublished study prepared by Ricerca Biosciences, LLC. 25 p.
46846900	Arysta LifeScience North America Corporation (2006) Submission of Exposure and Risk Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
46846901	Sweeney, L.; Mileson, B.; Gargas, M.; et al. (2006) Iodomethane: Supplemental Toxicology Information. Project Number: 34601. Unpublished study prepared by Arysta LifeScience North America Corporation, Sapphire Group, Inc. and Technology Sciences Group, Inc. 283 p.
46882500	Arysta LifeScience North America (2006) Submission of Efficacy Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
46882501	Allan, M.; Mezin, L. (2006) Iodomethane Technical: Additional Performance Data. Project Number: ARV2006PERF. Unpublished study prepared by Arysta Lifescience North America Corporation. 273 p.
46887000	Arysta LifeScience North America Corporation (2006) Submission of Efficacy and Economics Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
46887001	Sankula, S.; Marmon, G. (2006) Feasibility of MIDAS to Replace Methyl Bromide - A Comparitive Analysis. Project Number: ARV2006ECON. Unpublished study prepared by Arysta LifeScience North America Corporation. 159 p.
46928400	Arysta Life Science North America Corporation (2006) Submission of Toxicity Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
46928401	Sweeney, L.; Mileson, B.; Gargas, M. (2006) Concordance of the Nasal Epithelial

	Compartments of the Iodomethane PBPK Model and the Nasal Olfactory Epithelial Cell Degeneration Following Iodomethane Exposure. Project Number: 083006. Unpublished study prepared by Technology Sciences Group, Inc and The Sapphire Group. 39 p.
46934300	Arysta LifeScience Corporation (2006) Submission of Toxicity Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 2 Studies.
46934302	Sved, D. (2005) A Comparative Oral (Gavage) and Inhalation Metabolism and Toxicokinetic Study with Iodomethane in Female Rats: Final Report. Project Number: WIL/476001. Unpublished study prepared by WIL Research Laboratories, Inc. 351 p.
46934304	Mezin, L. (2006) Abstracts and Tables for Three Studies on the Effects of Iodomethane on Biological Functions in Mice, Rats and Dogs. Project Number: ALSNA/TOX/ABSTRACTS. Unpublished study prepared by Shin Nippon Biomedical Laboratories, Ltd. 36 p.
46962700	Arysta LifeScience North America Corporation (2006) Submission of Toxicity Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 3 Studies.
46962701	Nishimura, Y. (2003) A 90-Day Repeated Dose Toxicity Study of Iodomethane in Rats Followed by a 28-Day Recovery (with amendments): Final Report. Project Number: SBL98/24. Unpublished study prepared by Shin Nippon Biomedical Laboratories,ltd. 461 p.
46962702	Nemec, M. (2004) A Combined Inhalation Range-Finding Reproductive and Subchronic Toxicity Study of Iodomethane in Rats: Final Report. Project Number: WIL/418003. Unpublished study prepared by WIL Research Laboratories, Inc. 1317 p.
46962703	Morris, T. (2002) A Repeated-Dose 21-Day Dermal Toxicity Study of Iodomethane in Rats. Project Number: WIL/418009. Unpublished study prepared by WIL Research Laboratories, Inc. 629 p.
47028600	Arysta LifeScience North America Corporation (2007) Submission of Fate Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
47028601	Rayburn, W.; Robinson, A.; Braverman, L.; et. al. (2007) Iodide Concentrations in Matched Maternal Plasma, Cord Plasma and Amniotic Fluid from Term and Pre-Term Human Pregnancies: Supplemental to MRID 46446901: Iodomethane. Project Number: 06/240. Unpublished study prepared by Saphire Group. Technology Sciences Group Inc and New Mexico St. University. 308 p.
47053400	Arysta LifeScience North America Corp. (2007) Submission of Fate, Environmental Fate, Exposure and Risk Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 6 studies.
47053401	Desjardins, D.; Kendall, T.; Krueger, H. (2006) Iodomethane: A 7-Day Static-Renewal Toxicity Test with Duckweed (Lemna gibba G3): Final Report. Project Number: 443A/134B. Unpublished study prepared by Wildlife International, Ltd. 50 p.
47053402	Porch, J.; Krueger, H. (2007) Iodomethane, A Toxicity Test to Determine the Effects of the Test Substance on Seedling Emergence of Ten Species of Plants: Final Report. Project Number: 443/111. Unpublished study prepared by Wildlife International, Ltd. 148 p.
47053403	Baker, F.; Estigoy, L.; Belcher, T. (2003) Environmental (Off-Site) Monitoring and Indirect Flux Determination of Iodemethane (TM-425) Under Field Conditions Following Tarped/Raised Bed/Drip Irrigation Application. Project Number: 1198W, 1198W/1, 1198W/2. Unpublished study prepared by PTRL West, Inc. 569 p.
47053404	Dyer, N.; Brill, A. (2006) Maternal-Fetal Transport or Iron and Iodine in Humans Subjects. Project Number: ALSNA/TOX/2007/01. Unpublished study prepared by Arysta LifeScience North America Corp. 22 p.

47053405	Dyer, N.; Brill, A.; Glasser, S.; et. al. (2006) Maternal-Fetal Transport and Distribution of Fe and I in Humans. Project Number: ALSNA/TOX/2007/02. Unpublished study prepared by Arysta Life Science North America Corp. 11 p.
47053406	Fuse, Y. (2006) Development of the Hypothalamic-Pituitary-Thyroid Axis in Humans. Project Number: ALSNA/TOX/2007/03. Unpublished study prepared by Arysta LifeScience North America Corp. 25 p.
47086600	Arysta Life Science North America Corporation (2007) Submission of Exposure and Risk Data in Support of the Registration of Iodomethane Technical. Transmittal of 1 Study.
47086601	Mileson, B.; Sweeney, L.; Reiss, R.; et al. (2007) Iodomethane Human Health Risk Assessment: Revision Two (Previous MRID Nos. 46408802 and 46446903). Project Number: 810/07. Unpublished study prepared by Technology Sciences Group Inc. 144 p.
47106500	Arystal LifeScience North America Corporation (2007) Submission of Toxicity Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
47106501	Porch, J.; Krueger, H. (2007) Iodomethane: A Toxicity Test to Determine the Effects of the Test Substance on Vegetative Vigor of Ten Species of Plants: Final Report. Project Number: 443/112. Unpublished study prepared by Arysta LifeScience North America America Corporation. 148 p.
47127300	Arysta LifeScience North America Corporation (2007) Submission of Product Chemistry Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 study.
47127301	Mungalachetty, P. (2007) Midas EC Bronze: Determination of Storage Stability and Corrosion Characteristics. Project Number: 04/0262/G1, ARV/04/425/006, AA/31876/22. Unpublished study prepared by Toxikon Corp. 47 p.
47132500	Arysta LifeSciences North America (2007) Submission of Product Chemistry Data in Support of the Application for Registration of Iodomethane Technical and the Experimental Use of Iodomethane. Transmittal of 1 Study.
47132501	Arysta LifeScience North Ameri (2007) Documentation Supporting Application for Experimental Use Permit (EUP): Iodomethane. Project Number: ARV2007EUP. Unpublished study prepared by Arysta LifeScience North America. 57 p.
47172600	Arysta LifeScience North America (2007) Submission of Exposure and Risk Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
47172601	Tobia, A.; Mileson, B. (2007) Institutional Review Board Documentation Supplementary Report to: Iodide Concentrations in Matched Maternal Plasma, Cord Plasma, and Amniotic Fluid from Term and Pre-Term Human Pregnancies. Project Number: 070507. Unpublished study prepared by Arysta LifeScience North America Corporation. 80 p.
47196700	Arysta LifeScience North America Corporation (2007) Submission of Fate Data in Support of the Application for Registration of Iodomethane Technical. Transmittal of 1 Study.
47196701	Mileson, B.; Tinsworth, E.; Rhodes, B. (2007) Documentation of Ethical Conduct of a Human Study of Iodide Concentrations in Maternal Plasma, Cord Plasma, and Amniotic Fluid, Supplemental to MRID 47028601. Project Number: 080607. Unpublished study prepared by Technology Sciences Group, Inc., Exponent, Inc., and Arysta LifeScience North America Corporation. 131 p.