Acceleron™ IC-609 Insecticide Seed Treatment for Corn Version: 1.0 Effective date: 19-June-2009

MONSANTO COMPANY

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Safety Data Sheet Commercial Product

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name Acceleron™ IC-609 Insecticide Seed Treatment for Corn

EPA Registration No. 264-789-524

Company

MONSANTO COMPANY, 800 N. Lindbergh Blvd., St. Louis, MO, 63167

Telephone: 800-332-3111, Fax: 314-694-5557

E-mail: TS-SAFETYDATASHEET@DOMINO.MONSANTO.COM

Emergency numbers

FOR CHEMICAL EMERGENCY, SPILL LEAK, FIRE, EXPOSURE, OR ACCIDENT Call CHEMTREC - Day or Night: 1-800-424-9300 toll free in the continental U.S., Puerto Rico, Canada, or Virgin Islands.

For calls originating elsewhere: 703-527-3887 (collect calls accepted).

FOR MEDICAL EMERGENCY - Day or Night: +1 (314) 694-4000 (collect calls accepted).

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Component Name</u> <u>CAS-No.</u> <u>Average % by Weight</u>

Clothianidin 210880-92-5 48.00

Glycerine 56-81-5

SECTION 3. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview Caution! Harmful if swallowed or absorbed through skin. Avoid contact with skin,

eyes and clothing. Toxic to aquatic invertebrates.

Physical State liquid suspension

Appearance white to off-white

Routes of Exposure Inhalation, Skin Absorption, Eye contact, Ingestion

Immediate Effects

Eye Avoid contact with eyes.

Skin Harmful if absorbed through skin. Avoid contact with skin and clothing.

Ingestion Harmful if swallowed. Do not take internally.

Inhalation Do not breathe vapours or spray mist.

Chronic or Delayed

Long-Term

This product or its components may have target organ effects.

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Potential Environmental

Effect

Toxic to aquatic invertebrates.

SECTION 4. FIRST AID MEASURES

General When possible, have the product container or label with you when calling a

poison control center or doctor or going for treatment.

Eye Hold eye open and rinse slowly and gently with water for 15-20 minutes.

Remove contact lenses, if present, after the first 5 minutes, then continue rinsing

eye. Call a physician or poison control center immediately.

Skin Take off contaminated clothing and shoes immediately. Wash off immediately

with plenty of water for at least 15 minutes. Call a physician or poison control

center immediately.

Ingestion Call a physician or poison control center immediately. Rinse out mouth and give

water in small sips to drink. DO NOT induce vomiting unless directed to do so by

a physician or poison control center. Never give anything by mouth to an

unconscious person. Do not leave victim unattended.

Inhalation Move to fresh air. If person is not breathing, call 911 or an ambulance, then give

artificial respiration, preferably mouth-to-mouth if possible. Call a physician or

poison control center immediately.

Notes to Physician

Treatment Treat symptomatically. There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

 $> 100 \, ^{\circ}\text{C} \, / > 212 \, ^{\circ}\text{F}$ Flash point

Suitable Extinguishing

Media

Water spray, Carbon dioxide (CO2), Foam, Dry chemical

Fire Fighting Instructions

Keep out of smoke. Fight fire from upwind position. Cool closed containers/ tanks exposed to fire with water spray. Do not allow run-off from fire fighting to

enter drains or water courses.

Firefighters should wear NIOSH approved self-contained breathing apparatus

and full protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled

product or contaminated surfaces.

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal

binder). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing

environmental regulations.

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Additional Advice

Use personal protective equipment. Do not allow to enter soil, waterways or

waste water canal.

SECTION 7. HANDLING AND STORAGE

Handling Procedures Handle and open container in a manner as to prevent spillage. Maintain

exposure levels below the exposure limit through the use of general and local

exhaust ventilation.

Storing Procedures Store in a cool, dry place and in such a manner as to prevent cross

> contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Work/Hygienic **Procedures**

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Min/Max Storage **Temperatures**

Recommended minimum transport/storage temperature: -9 °C / 16 °F Recommended maximum transport/storage temperature: 38 °C / 100 °F The 30-day storage temperature average must not exceed the recommended

maximum.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection Follow all label instructions. Train employees in safe use of the product.

> Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash

PPE separately from other laundry.

Eye/Face Protection Tightly fitting safety goggles

Hand protection Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)

Body Protection Wear long-sleeved shirt and long pants and shoes plus socks.

Respiratory Protection When respirators are required, select NIOSH approved equipment based on

> actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Exposure Limits

Clothianidin	210880-92-5	Manufacturer*		2.8 mg/m3
Glycerine	56-81-5	ACGIH	TWA	10 mg/m3
		OSHA Z1	PEL	5 mg/m3
		OSHA Z1	PEL	15 mg/m3
		OSHA Z1A	TWA	5 mg/m3
		OSHA Z1A	TWA	10 mg/m3
		TX ESL	ST ESL	50 ug/m3
		TX ESL	AN ESL	5 ug/m3

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*Manufacturer suggested limit

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

white to off-white **Appearance**

Physical State liquid suspension

5 - 7 (100 %) pН

1.25 g/cm3 at 20 °C **Density**

Water solubility miscible

400 - 650 mPa.s **Viscosity**

SECTION 10. STABILITY AND REACTIVITY

Incompatibility Oxidizing agents

Hazardous Reactions Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on this product as formulated. The non-acute information pertains to the technical-grade active ingredient, clothianidin.

Acute Oral Toxicity male rat: LD50: <= 2,000 mg/kg

female rat: LD50: 2,000 mg/kg

Acute Dermal Toxicity male/female combined rat: LD50: > 4,000 mg/kg

Acute Inhalation Toxicity male/female combined rat: LC50: > 2.6 mg/l

Exposure time: 4 h

Determined in the form of liquid aerosol.

male/female combined rat: LC50: > 10.4 mg/l

Exposure time: 1 h

Determined in the form of liquid aerosol.

Extrapolated from the 4 hr LC50.

Skin Irritation rabbit: No skin irritation.

Eye Irritation rabbit: No eye irritation.

Sensitization guinea pig: Non-sensitizing.

Chronic Toxicity Clothianidin caused effects in the liver, kidney and/or ovaries following chronic

exposure to high doses in mice, rats and dogs.

Assessment Carcinogenicity

Clothianidin was not carcinogenic in lifetime feeding studies in rats and mice.

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ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Reproductive & **Developmental Toxicity** REPRODUCTION: Clothianidin is not considered a reproductive toxicant at non-

maternally toxic dose levels.

DEVELOPMENTAL TOXICITY: Clothianidin was not a primary developmental toxicant in rats and rabbits. Developmental effects were observed in rabbits but

were considered secondary to maternal toxicity.

Neurotoxicity Clothianidin was not a neurotoxicant in acute, subchronic and developmental

neurotoxicity screening studies in rats.

Mutagenicity Clothianidin was not genotoxic based on the overall weight of evidence in a

battery of in vitro and in vivo tests.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions

Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not allow to get into surface water, drains and ground water. Apply this product as specified on the label.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

Container Disposal

Do not re-use empty containers. Triple rinse containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke. Follow advice on product label and/or leaflet.

SECTION 14. TRANSPORT INFORMATION

TRANSPORTATION CLASSIFICATION: Not regulated for Domestic Surface Shipment

FREIGHT CLASSIFICATION:

Insecticides or Fungicides, N.O.I.; other than poison

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 264-789-524 **MONSANTO COMPANY**

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US Federal Regulations

TSCA list

Glycerine 56-81-5

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

IL, MN, RI Glycerine 56-81-5

Canadian Regulations

Canadian Domestic Substance List

Glycerine 56-81-5

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

Safe Drinking Water Act Maximum Contaminant Levels

None.

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 2 Reactivity - 0 Others - none

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason to Revise: Not applicable Not applicable

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

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other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.