MATERIAL SAFETY DATA SHEET

I IDENTIFICATION OF THE PRODUCT

PRODUCT NAME          IMIDACLOPRID 20% SL
TRADE NAME            CLICK 20SL®
CHEMICAL NAME         (1-[(6-chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine
CHEMICAL GROUP        CHLORONICOTINYL
                       (NEONICOTINOID SYSTEMIC INSECTICIDE)
FORMULATION           SUSPENSION CONCENTRATE
                       (=FLOWABLE CONCENTRATE) (SC)
RECOMMENDED USE       INSECTICIDE FOR AGRICULTURAL USE
FORMULATOR            MEGHMANI ORGANIC LIMITED
ADDRESS               CORPORATE OFFICE
                       MEGHMANI HOUSE
                       SHREE NIVAS SOCIETY off NEW VIKASGRUH ROAD
                       PALDI AHMEDABD – 380 007
                       GUJARAT INDIA
                       FACTORY
                       PLOT NUMBER 403 / 404 / 452
                       POST - CHHARODI
                       TALUKA - SANAND
                       DISTRICT - AHMEDABAD - 382 170
                       GUJARAT INDIA

TELEPHONE            CORPORATE OFFICE
                       +91-7937-73251 / 73252 / 73253
                       +91-79-664 06 68 / 664 06 69
FAX                   +91-7937-73254 / 91-79-664 06 70

IN CASE OF EMERGENCE CALL +91-79-583 46 57

DISTRIBUTOR          AGRICHEM AFRICA LIMITED®
2 COMPOSITION INFORMATION ON INGREDIENTS

Hazardous Components

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS / EC Number</th>
<th>Symbols(s)</th>
<th>R-phrase(s)</th>
<th>Concentration(%)</th>
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<tr>
<td>Imidacloprid</td>
<td>138261-41-3</td>
<td>Xn, N</td>
<td>R22, R50/53</td>
<td>18.30</td>
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<tr>
<td></td>
<td>428-040-8</td>
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<td>Glycerine</td>
<td>56-81-5</td>
<td></td>
<td></td>
<td>&gt; 1.00</td>
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<td></td>
<td>200-289-5</td>
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<td></td>
</tr>
</tbody>
</table>

For the full text of the R-phrases mentioned in this Section, see Section 16.

3 HAZARDS IDENTIFICATION

Risk advice to man and the environment Harmful if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

ACUTE EFFECTS

Physical Hazards None

Health Hazards

Inhalation Vapor or spray mist may be harmful if inhaled

Eye None irritating to the eyes

Skin None irritating or sensitizing to skin

Ingestion Harmful if swallowed

4 FIRST AID MEASURES

Swallowed Provided the patient is conscious, wash out mouth with water. Vomiting should only be induced under the direction of a physician. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus. Immediately transport victim to an emergency facility.

Eyes Irrigate for 15 minutes with copious quantities of water with eyelids held open. If
irritation persists, seek medical attention immediately.

**Skin** Remove contaminated clothing. Flush skin with running water for a minimum of 20 minutes. If swelling, redness, blistering or irritation occurs seek medical attention immediately.

**Inhalation** Remove victim to fresh air. If not breathing, give artificial respiration preferably mouth-to-mouth. If breathing is labored, give oxygen. Obtain immediate medical attention.

**Note to Physician** If ingestion has occurred less than 2 hours earlier, carry out careful gastric lavage; use endotracheal cuff if available, to prevent aspiration. Observe patient for respiratory difficulty from aspiration pneumonitis. Give artificial resuscitation and appropriate chemotherapy if respiration is depressed. Symptomatic treatment and supportive therapy as indicated.

5 FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA** For small fires, use foam, carbon dioxide or dry chemical powder extinguishant. For large fires, use foam or water-fog, avoid use of water jet. Contain run-off water with for example, temporary earth barriers.

**FIRE AND EXPLOSION HAZARDS** Flash Point: 67.0°C Combustible liquid: Keep fire exposed containers cool by spraying with water.

**EXTINGUISHING MEDIA WHICH SHOULD NOT BE USED FOR SAFETY REASONS** High volume water jet

**SPECIFIC HAZARDS DURING FIRE FIGHTING**
In the event of fire the following may be released
- Hydrogen chloride (HCl)
- Hydrogen cyanide (hydrocyanic acid)
- Carbon monoxide (CO)
- Nitrogen Oxides (NOx)

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS** In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

**FURTHER INFORMATION** Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

**FIRE FIGHTING INSTRUCTIONS** Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Dike and collect water used to fight fire to prevent environment damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage.
from excessive water run off.

6 ACCIDENTAL RELEASE MEASURES

Contain spill and absorb with sand or proprietary absorbent (vermiculite). Prevent from entering drains, waterway or sewers. Collect in sealed open top containers for disposal. Generously cover the contaminated areas with common, household detergent brush in a small amount of water; work the detergent into the remaining spilled material forming slurry. Collect slurry in sealed open top container for disposal. This material is water pollutant and should be prevented from drainage systems and bodies of water.

Personal precautions
Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

Environmental precautions
Do not allow to get into surface water, drains and ground water.

Methods for cleaning up
Triple rinse containers, add rinsate to the spray tank, then offer container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. On-site disposal of concentrate is not acceptable. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

Waste disposal should be carried out by industrial incineration of burial at a site approved by local authorities.

Additional advice
Information regarding safe handling, see section 7
Information regarding personal protective equipment, see section 8
Information regarding waste disposal, see section 13

7 HANDLING AND STORAGE

Requirements for Storage Rooms Use only in a well-ventilated area. Do not reuse empty containers. Keep the container closed when not in use. Keep in a well-ventilated, dry place away from heat and other sources of ignition.

Additional Information Do not store near feed, food and water or within the reach of children.

Handling Advice on safe handling. Use only in area provided with appropriate exhaust ventilation.

Storage Requirements for storage areas and containers. Keep containers tightly closed in a dry, cool
and well-ventilated place. Store in a place accessible by authorized persons only. Store in original container.

**Advice on common storage** Keep away from food, drink and animal feedingstuffs. Temperature tolerance Minimum -10 °C. Maximum 40 °C

**Suitable materials** HDPE (high density polyethylene)

### 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

**Personal protective equipment** In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

**Respiratory Protection** Not required; except in case of aerosol formation.

**Hand Protection** Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.

**Eye Protection** Wear goggles conforming to EN166 (Field of Use 5 or equivalent).

**Skin and Body Protection** Wear standard coverall and type 3 suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

**Hygiene Measures** Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

**User safety recommendation** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

### 9 PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
**Form** liquid, suspension

**Colour** white to light beige

**Odour** weak, characteristic
Safety data

**pH** 7 - 8.5 at 100% (23 °C)

**Flash point** No flash point - Determination conducted up to the boiling point.

**Autoignition temperature** 405 °C

**Density** ca.1,10 g/cm³ at 20 °C

**Water solubility** miscible

**Viscosity, dynamic** 400 - 800 mPa.s at 23 °C **Velocity gradient** 7,5 /s

**Surface tension** 48,9 mN/m

**Explosivity** Not explosive 92/69/EEC, A.14 / OECD 113

10 STABILITY AND REACTIVITY

**Stability** Stable under room temperature

**Incompatibility** Strong oxidizing agents. Acids and alkaline materials

**Hazardous Polymerization** Will not occur

**Condition to Avoid** Keep away from heat. Keep away from sources of ignition, no smoking

**Hazardous Decomposition Product** Thermal decomposition products are toxic and my include Hydrocarbons Ammonia, Organic And Acid Halides, Oxide of Carbon, Nitrogen and Sulfur.

11 TOXICOLOGICAL INFORMATION

**Acute oral toxicity** \( \text{LD}_{50} \) (rat) > 1.218 mg/kg

**Acute inhalation toxicity** \( \text{LC}_{50} \) (rat) > 2,238 mg/l
Exposure time 4 h
Determined in the form of a respirable aerosol.
Highest attainable concentration.

**Acute dermal toxicity** \( \text{LD}_{50} \) (rat) > 4.000 mg/kg
Skin irritation  No skin irritation (rabbit)

Eye irritation  No eye irritation (rabbit)

Sensitisation  Non-sensitizing. (guinea pig)
OECD Test Guideline 406, Buehler test

12 ECOLOGICAL INFORMATION

Ecotoxicity Effects

Toxicity to fish  \( LC_{50} \) (Rainbow trout \( \text{(Oncorhynchus mykiss)} \)) > 535 mg/l
Exposure time 96 h

Toxicity to daphnia  \( EC_{50} \) (Water flea \( \text{(Daphnia magna)} \)) > 535 mg/l
Exposure time 24 h

Toxicity to daphnia  \( EC_{50} \) (Chironomus riparius \( \text{(non-biting midge)} \)) 0,0552 mg/l
Exposure time 24 h
The value mentioned relates to the active ingredient

Toxicity to algae  \( IC_{50} \) (Desmodesmus subspicatus) > 1.000 mg/l
Growth rate Exposure time 72 h

13 DISPOSAL CONSIDERATIONS

Disposal Method  Do not contaminate pounds, waterways or ditches with chemical or used containers. Dispose of in facility permitted for hazardous waste.

Container Disposal  Empty container retains product residue. Triple rinse empty containers, return rinse water to dilution mixture, and dispose of dilution mixture as a hazardous waste if it cannot be disposed of by use according to label instructions. Do not reuse container. Offer if for recycling or reconditioning, or puncture and dispose of in properly permitted landfill.

14 TRANSPORT INFORMATION

ADR/RID/ADNR
UN-Number  3082

Labels  9

Packaging Group  III

Hazard NUMBER  90
Description of the Goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (IMIDACLOPRID SOLUTION)

Tunnel Code: E

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

IMDG
UN-Number: 3082
Labels: 9
Packaging Group: III
EmS: F-A, S-F

Marine pollutant: Marine Pollutant

Description of the Goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (IMIDACLOPRID SOLUTION)

IATA
UN-Number: 3082
Labels: 9
Packaging group: III

Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (IMIDACLOPRID SOLUTION)

15 REGULATORY INFORMATION

Classification and labelling in accordance with the EC Directive on dangerous preparations 1999/45/EC as amended.

Classification

Hazard warning labelling compulsory

Hazardous components which must be listed on the label
Imidacloprid
Symbol(s)
Xn  Harmful
N   Dangerous for the environment

R-phrase(s)
R22  Harmful if swallowed
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-phrase(s)
S35  This material and its container must be disposed of in a safe way
S57  Use appropriate container to avoid environmental contamination

Exceptional labelling
To avoid risks to man and the environment, comply with the instructions for use.

Further information
WHO-classification II (Moderately Hazardous)

16 OTHER INFORMATION

Further information
Text of R-phrases mentioned in Section 3
R22  Harmful if swallowed.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information given in this Data Sheet has been included in accordance with the guidelines established by Regulation (EC) 1907/2006. This data sheet complements the user’s instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

DISCLAIMER OF LIABILITY

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