

STEWARD® 30WG

Version 1.0

Revision Date 2018.01.03

Ref. 130000000325

This SDS adheres to the standards and regulatory requirements of Korea and may not meet the regulatory requirements in other countries.

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : STEWARD® 30WG
Synonyms : B10596913
 DPX-MP062 30 WG

Recommended use of the chemical and restrictions on use

Recommended use : Insecticide

Information on the Manufacturer/Supplier/Distributor

Company : FMC Korea Ltd.
Street address : 7th floor, Mijin Building, 111, Dogok-ro, Gangnam-gu, Seoul 06253, Republic of Korea

Responsible Department : No information available.

Telephone : +82-2-539-6411
Telefax : +82-2-567-4662
Emergency telephone number : +82-2-539-6411 for working time.
 There is no emergency telephone no. for 24hours.

2. HAZARDS IDENTIFICATION
GHS-Classification

Acute toxicity (Oral)	Category 4
Specific target organ toxicity - single exposure	Category 2
Specific target organ toxicity - repeated exposure	Category 2
Chronic aquatic toxicity	Category 2

Endpoints which are not classified, cannot be classified or are not applicable are not shown.

GHS Label element

Pictogram :



Signal word : Warning

Hazard statements : Harmful if swallowed.
 Toxic to aquatic life with long lasting effects.
 May cause damage to organs. (Central nervous system)
 May cause damage to organs through prolonged or repeated exposure. (Blood)

STEWARD® 30WG

Version 1.0

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Ref. 130000000325

Precautionary statements : Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
Get medical advice/ attention if you feel unwell.
Rinse mouth.
Collect spillage.
Store locked up.
Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Components

Chemical Name	CAS-No.	Concentration
Indoxacarb	173584-44-6	30 %
Other Ingredients		70 %

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Eye contact : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact : Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation : Remove person to fresh air. If signs/symptoms continue, get medical attention. Artificial respiration and/or oxygen may be necessary. Call a poison control center or doctor for treatment advice.

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

Indication of immediate medical attention and notes for physician : No information available.

5. FIREFIGHTING MEASURES

Suitable (and inappropriate) extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO2)

Unsuitable extinguishing media:
High volume water jet, (contamination risk)

Specific hazards arising : Evacuate personnel and keep upwind of fire. If area is heavily exposed to fire and

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Revision Date 2018.01.03

Ref. 130000000325

from the chemical if conditions permit, let fire burn itself out since water may increase the area contaminated. Do not allow run-off from fire fighting to enter drains or water courses. Cool containers / tanks with water spray.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Dispose of in accordance with local regulations.

Environmental precautions : Prevent material from entering sewers, waterways, or low areas.

Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE**Precautions for safe handling**

Technical measures/Precautions : Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

Precautions for safe handling : No information available.

Hygiene measures : Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Avoid breathing dust or vapour.

Conditions for safe storage

Suitable storage conditions : Store in a cool, dry place. Store product in original container only in a location inaccessible to children and pets. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material. Observe label precautions.

Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in original container. Keep tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Limits of the chemical substance, biological exposure limits and etc.**

No information available.

Engineering measures : Use only with adequate ventilation.

STEWARD® 30WG

Version 1.0

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Ref. 130000000325

Personal protective equipment

- Respiratory protection : Where there is potential for airborne exposures in excess of applicable limits, wear approved respiratory protection with dust/mist cartridge.
- Eye protection : Wear protective eyewear to prevent contact with this substance.
- Hand protection : Material: Protective gloves
- Skin and body protection : Wear protective clothing such as gloves, apron, boots, or coveralls, as appropriate.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

- Physical state : solid
- Form : dry, free flowing granules
- Colour : dark brown

Odour : mild woody

Odour Threshold : no data available

pH : 7.5 (10 g/l) (20 °C)

Melting point/freezing point

no data available

Boiling point/boiling range

no data available

Flash point : not applicable

Evaporation rate : no data available

Flammability (solid, gas) : no data available

Upper and lower flammable or explosive limits

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : Not available for this mixture.

STEWARD® 30WG

Version 1.0

Revision Date 2018.01.03

Ref. 130000000325

Solubility(ies)

Water solubility : not determined

Solubility in other solvents : no data available

Vapour density : no data available**Specific gravity**

Bulk density : 800 kg/m3

**Partition coefficient:
n-octanol/water** : no data available**Auto-ignition temperature** : Self ignition: not auto-flammable**Decomposition temperature** : no data available**Viscosity** :**Molecular weight** : no data available**10. STABILITY AND REACTIVITY**Chemical stability &
Possibility of hazardous
reactions : Stable at normal temperatures and storage conditions.

Conditions to avoid : No information available.

Materials to avoid : None reasonably foreseeable.

Hazardous decomposition
products : No information available.**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

Respiratory system: Refer to below subheading

Oral: Refer to below subheading

Eye/Skin contact: Refer to below subheading

Health hazard information

STEWARD® 30WG

Version 1.0

Revision Date 2018.01.03

Ref. 130000000325

Acute toxicity	: STEWARD® 30WG: Oral: LD50/rat male: 1,867 mg/kg LD50/rat female: 687 mg/kg Inhalation: LC50/4 h/rat : > 5.6 mg/l Dermal: LD50/rat : > 5,000 mg/kg
Skin corrosion/irritation	: STEWARD® 30WG: Species: rabbit Result: No skin irritation
Serious eye damage/eye irritation	: STEWARD® 30WG: Species: rabbit Result: No eye irritation
Respiratory sensitization / Skin sensitization	: STEWARD® 30WG: Species: guinea pig Result: Animal test did not cause sensitization by skin contact.
Germ cell mutagenicity	: Indoxacarb: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Did not cause genetic damage in animals.
Carcinogenicity	: Indoxacarb: Did not show carcinogenic effects in animal experiments.
Reproductive toxicity	: Indoxacarb: Animal testing did not show any effects on fertility. Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.
Specific Target Organs Toxicity (Single/Repeated)	: Refer to acute toxicity and/or repeated dose toxicity data for more information on target organs if applicable.
Aspiration toxicity	: no data available
Other	: Indoxacarb: Repeated dose toxicity: Inhalation, rat Central nervous system effects, Incoordination, Increased mortality or reduced survival, altered hematology

STEWARD® 30WG

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Target Organs: Central nervous system, Blood
Repeated dose toxicity: Oral, multiple species
altered hematology
Target Organs: Blood

12. ECOLOGICAL INFORMATION**Toxicity on aquatic terrestrial organisms**

- Toxicity to fish : STEWARD® 30WG:
LC50/96 h/Oncorhynchus mykiss (rainbow trout): 1.8 mg/l
- Other : STEWARD® 30WG:
EbC50/72 h/Pseudokirchneriella subcapitata (green algae): > 1.2 mg/l
EC50/48 h/Daphnia magna (Water flea): 1.7 mg/l
- Persistence and degradability : no data available
Bioaccumulation : no data available
Mobility in soil : no data available
Other adverse effects : STEWARD® 30WG:
See product label for additional application instructions relating to environmental precautions.

13. DISPOSAL CONSIDERATIONS

- Waste disposal methods : In accordance with local and national regulations. Refer to the product label for instructions. Do not contaminate ponds, waterways or ditches with chemical or used container.
- Precautions for Disposal : Do not re-use empty containers.

14. TRANSPORT INFORMATION**IMDG**

- UN number : 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Indoxacarb)
Class : 9
Packing group : III
Marine pollutant : yes

IATA

- UN number : 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
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STEWARD® 30WG

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Revision Date 2018.01.03

Ref. 130000000325

Packing group : III

Matters needing attention : not applicable
for transportation**15. REGULATORY INFORMATION****Industrial Safety and Health Act**
not regulated**Toxic Chemicals Control Act**
not regulated**Dangerous Substance Safety Management Act**
not regulated**Waste Control Act**
Dispose of in accordance with local regulations.**Regulations in other countries**
No information available.**16. OTHER INFORMATION**Sources of key data used to : US MSDS No.: M0000402
compile the Safety Data Sheet

Issuing date : 2018.01.03

Number of revision times and : 2018.01.03
the date of preparation of the Version 3.2
latest revision

Significant change from previous version is denoted with a double bar.

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