

HARMONY® 75 DF

Version 1.0

Revision Date 2018.01.03

Ref. 130000000178

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 : HARMONY® 75 DF
Synonyms : B10029758
DPX-M6316 75DF

Recommended use of the chemical and restrictions on use

Recommended use : Herbicide

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 aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

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

GHS Label element

Pictogram :



Signal word : Warning

Hazard statements : Very toxic to aquatic life with long lasting effects.

Precautionary statements : Collect spillage.
Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

HARMONY® 75 DF

Version 1.0

Revision Date 2018.01.03

Ref. 130000000178

Pure substance/mixture : Mixture

Components

Chemical Name	CAS-No.	Concentration
Thifensulfuron methyl	79277-27-3	75 %
Other Ingredients		25 %

4. FIRST AID MEASURES

Never give anything by mouth to an unconscious person. 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. If eye irritation persists, consult a specialist.
- 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 : Treat symptomatically.

5. FIREFIGHTING MEASURES

- Suitable (and inappropriate) extinguishing media : Water spray, Dry chemical, Foam, Carbon dioxide (CO₂)
- Unsuitable extinguishing media:
High volume water jet, (contamination risk)
- Specific hazards arising from the chemical : Prevent fire extinguishing water from contaminating surface water or the ground water system. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. (on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers / tanks with water spray.
- Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, : Review sections 5 and 7 of the SDS before proceeding with clean-up. Use

HARMONY® 75 DF

Version 1.0

Revision Date 2018.01.03

Ref. 130000000178

protective equipment and
emergency procedures

personal protective equipment.

Never return spills in original containers for re-use. 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 : Provide appropriate exhaust ventilation at places where dust is formed. Wear personal protective equipment.Precautions for safe
handling : Keep away from heat and sources of ignition.

Hygiene measures : Avoid contact with skin, eyes and clothing. Avoid breathing dust. 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. Wash contaminated clothing before re-use.

Conditions for safe storageSuitable storage
conditions : 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 : Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Eye protection : Goggles, face shield, or safety glasses.

Hand protection : Material: Chemical-resistant gloves

Skin and body protection : Wear protective clothing such as gloves, apron, boots, or coveralls, as appropriate.

HARMONY® 75 DF

Version 1.0

Revision Date 2018.01.03

Ref. 130000000178

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Physical state : solid

Form : solid , dry, free flowing granules

Colour : tan

Odour : not significant

Odour Threshold : no data available

pH : 4.37 (10 g/l)

Melting point/freezing point

Melting point/range : ≥ 182 °C

Boiling point/boiling range

no data available

Flash point : not applicable

Evaporation rate : no data available

Flammability (solid, gas) : Does not sustain combustion.

Upper and lower flammable or explosive limits

Upper explosion limit : Not available for this mixture.

Lower explosion limit : Not available for this mixture.

Vapour pressure : Not available for this mixture.

Solubility(ies)

Water solubility : dispersible

Solubility in other solvents : no data available

Vapour density : no data available

Specific gravity

Density : 0.65 g/cm³

**Partition coefficient:
n-octanol/water** : no data available

Auto-ignition temperature : no data available

Decomposition temperature : Not available for this mixture.

HARMONY® 75 DF

Version 1.0

Revision Date 2018.01.03

Ref. 130000000178

Viscosity : no data available**Molecular weight** : no data available**10. STABILITY AND REACTIVITY**

Chemical stability &
Possibility of hazardous
reactions : No decomposition if stored and applied as directed.
Dust may form explosive mixture in air.

Conditions to avoid : Stable at normal temperatures and storage conditions.

Materials to avoid : No information available.

Hazardous decomposition
products : Carbon oxides, Sulphur oxides, nitrogen oxides (NOx)

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

Acute toxicity : HARMONY® 75 DF:

Oral: LD50/rat : > 5,000 mg/kg

Inhalation: LC50/4 h/rat : 5.3 mg/l

Dermal: LD50/rabbit : > 5,000 mg/kg

Skin corrosion/irritation : HARMONY® 75 DF:

Species: rabbit

Result: No skin irritation

Serious eye damage/eye
irritation : HARMONY® 75 DF:

Species: rabbit

Result: No eye irritation

Respiratory sensitization /
Skin sensitization : HARMONY® 75 DF:

Species: guinea pig

Classification: Did not cause sensitisation on laboratory animals.

Result: Animal test did not cause sensitization by skin contact.

HARMONY® 75 DF

Version 1.0

Revision Date 2018.01.03

Ref. 130000000178

Germ cell mutagenicity	: Thifensulfuron methyl: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Did not cause genetic damage in animals.
Carcinogenicity	: Thifensulfuron methyl: Animal testing did not show any carcinogenic effects.
Reproductive toxicity	: Thifensulfuron methyl: Animal testing showed no reproductive toxicity. Did not show teratogenic effects in animal experiments. 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	: Thifensulfuron methyl: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions. Repeated dose toxicity: Oral - feed, multiple species Reduced body weight gain

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

Toxicity to fish	: HARMONY® 75 DF: LC50/96 h/Oncorhynchus mykiss (rainbow trout): 91 mg/l
Other	: HARMONY® 75 DF: EC50/14 d/Lemna gibba: 0.00129 mg/l EC50/48 h/Daphnia magna (Water flea): 250 mg/l
Persistence and degradability	: no data available
Bioaccumulation	: no data available
Mobility in soil	: no data available
Other adverse effects	: HARMONY® 75 DF:

HARMONY® 75 DF

Version 1.0

Revision Date 2018.01.03

Ref. 130000000178

See product label for additional application instructions relating to environmental precautions.

13. DISPOSAL CONSIDERATIONS

- Waste disposal methods : In accordance with local and national regulations. 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.
(Thifensulfuron-methyl)
- Class : 9
- Packing group : III
- Marine pollutant : yes (Thifensulfuron-methyl)

IATA

- UN number : 3077
- Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Thifensulfuron-methyl)
- Class : 9
- Packing group : III
- Matters needing attention for transportation : not applicable

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.

HARMONY® 75 DF

Version 1.0

Revision Date 2018.01.03

Ref. 130000000178

16. OTHER INFORMATION

Sources of key data used to compile the Safety Data Sheet : US MSDS No.: M0000042

Issuing date : 2018.01.03

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

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.