

MATERIAL SAFETY DATA SHEET**Product****TALSTAR 80 Flo**

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Product code : 6240 NPF-UK-01

Version : 1.01

Date : 24/03/2006

Supersedes : 24/03/2005

01 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

PRODUCT NAME : TALSTAR 80 Flo
Name : FMC CHEMICAL
Address : Boulevard de la Plaine, 9/3
1050 BRUXELLES
BELGIQUE
Telephone number : 00 32 2 645 95 84
Telefax number : 00 32 2 645 96 55
EMERGENCY TELEPHONE
NUMBER : (*) 00 32 14 58 45 45 (*)
Recommended use : Insecticide / Miticide

02 COMPOSITION / INFORMATION ON INGREDIENTS

PREPARATION :
Chemical nature : Pyrethroid pesticide based on Bifenthrin
Components contributing to the hazard : (*)
Bifenthrin (CAS : 82657-04-3, EC auto-class. : T; R25 - Xn; R20 - R 43 - N; R50-53) : < 10 % (*)
Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) (CAS : 55965-84-9, EC classification : T; R23/24/25 - C; R34 - R43 - N; R50-53) : < 1 %
Tridecyl alcoholethoxylate phosphate, salt (CAS : 68186-36-7, EC auto-class. : Xi; R36/38) : < 5 % (*)

03 HAZARDS IDENTIFICATION

MOST IMPORTANT HAZARDS :
Adverse human health effects : Harmful by inhalation and if swallowed
May cause sensitization by skin contact
Environmental effects : Very toxic to aquatic organisms
May cause long-term adverse effects in the aquatic environment
Physical and chemical hazards :
- Fire or explosion : Slightly combustible. May support combustion at elevated temperatures
Burning and thermal decomposition may form toxic by-products
Classification of the product : According to EC criteria, this product is classified as :
- HARMFUL
- SENSITIZING
- DANGEROUS FOR THE ENVIRONMENT

04 FIRST AID MEASURES

Inhalation : Move the affected person to the fresh air
If the person feels unwell :
Call a doctor
Skin contact : Remove all contaminated clothing and footwear
Immediately rinse with plenty of water.
In case of redness or irritation, call a doctor

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Eye contact : Rinse immediately with plenty of water (for at least 15 minutes).
If irritation persists, consult an eye specialist

Ingestion : If the person is fully conscious, make him/her drink water. Never give an unconscious person anything to drink
If the person is fully conscious, try to induce vomiting
Consult a doctor

05 FIRE-FIGHTING MEASURES

Suitable extinguishing media : Carbon dioxide (CO2)
Foam
Powders

Not suitable extinguishing media : Water (the product is hazardous for the environment - do not dilute it)

Specific fire fighting methods : Isolate fire area. Evacuate downwind
Contain the extinguishing fluids by bunding (the product is hazardous for the environment)
Do not attempt to fight the fire without suitable protective equipment
Do not breathe fumes

Protection of fire-fighters : Self-contained breathing apparatus
Complete protective clothing

06 ACCIDENTAL RELEASE MEASURES

Environmental precautions : Do not allow product to spread into the environment
Contain the spilled material by bunding (product is hazardous for the environment)

Methods for cleaning up :

- Recovery : Recover the product with absorbent material
- Neutralization : Absorb spillage with:
 - earth or sandNeutralize non-recoverable product with :
 - a basic solution and an appropriate alcohol (methanol, ethanol or isopropanol)
- Cleaning/decontamination : Wash with plenty of water and detergent.
- Disposal : Dispose of contaminated material at an authorized site

07 HANDLING AND STORAGE**HANDLING**

Technical measures : Ventilation

Precautions : Avoid any direct contact with the product

STORAGE

Storage conditions :

- Recommended : Store :
 - the container tightly closed and dry
 - in a cool, well-ventilated area
 - away from any source of ignition

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- out of reach of children.
- away from food and drinks and animal foodstuffs

Packaging materials :

- Recommended : Original packaging

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures : Ensure good ventilation of the work station

Personal protective equipment :

- Respiratory protection : In the event of insufficient ventilation:
Filtering respiratory protective device with a specific pesticide canister.
- Hand protection : Handling the product (as is) :
Protective rubber gloves
Neoprene protective gloves.
Protective gloves made of PVC
- Eye protection : Goggles
- Skin and body protection : Handling product in large quantities :
Impermeable suit (Hypalon, Tyvek, Saranex, PVC...)
Safety foot-wear.
- Collective emergency equipments : Safety shower
- Hygiene measures : Always wash your hands after handling the product

09 PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : Liquid
- Colour : grey
- Odour : chemical
- pH : 6.42 (Aqueous dispersion - 1 %)
- Flammability characteristics :
 - Flash point : > 100 °C
(Results based on a similar formulation).
- Specific gravity : 1.0279 g/cm³
- Solubility :
 - in water : Dispersible.

10 STABILITY AND REACTIVITY

- Stability : Stable at ambient temperature and under normal conditions of use
- Hazardous reactions :
 - Conditions to avoid : May decompose :
 - on heating
 - Hazardous decomposition products : On combustion or on thermal decomposition (following the evaporation of water) releases :
Chlorine
Carbon oxides (CO, CO₂)

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Hydrogen fluoride, Hydrogen chloride
Fluorine**11 TOXICOLOGICAL INFORMATION**

Product as it is :

Acute toxicity :

Harmful by inhalation
LC 50 inhalation / 4h / rat: 1.89 mg/l
LD 50 dermal (Rabbit): > 2000 mg/kg
LD 50 oral (Rat) : 632 mg/kg
(Results based on a similar formulation).
Harmful if swallowed

Acute symptoms :

Bleeding from the nose
Tremors
Convulsions

Local effects :

Skin contact :
Not irritating
Eye contact :
Not irritating

Sensitization :

May cause sensitization by skin contact

12 ECOLOGICAL INFORMATION

Persistence:

Bifenthrin :
Half-life (in soil) : 65-125 d

BIOACCUMULATION:

Octanol/water partition coefficient :

Bifenthrin :
> 6

Bioconcentration factor.

Bifenthrin :
BCF = 11750
Bioaccumulable.

ECOTOXICITY :

Effects on the aquatic environment :

Product as is :
Very toxic to aquatic organisms
May cause long-term adverse effects to the aquatic environment.
Bifenthrin :
Very toxic to aquatic organisms
LC 50 (Fish) : 0.15 - 0.35 µg/l
EC 50 (Daphnia) : 0.11 µg/l

Effects on terrestrial animals:

Bifenthrin :
LD50(birds) : 1800-2150 mg/kg**13 DISPOSAL CONSIDERATIONS**

WASTE FROM PRODUCT :

Prohibition :

Discharging waste into rivers and drains is prohibited

Destruction/Disposal :

Dispose of in accordance with relevant local regulations
Incinerate at a licensed installation

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CONTAMINATED PACKAGING :

Destruction/disposal :

Recycle following cleaning or dispose of at an authorised site

14 TRANSPORT INFORMATION**INTERNATIONAL REGULATIONS :**

Land transportation :

- Rail/road (RID/ADR) :

UN number : 3082

Class : 9

Classification code : M6

Hazard identification number : 90

Labelling : 9

Packaging group : III

Sea (IMO/IMDG) :

UN number : 3082

Class : 9

Labelling : 9

Packaging group : III

Air (ICAO-IATA) :

UN number : 3082

Class : 9

Labelling : 9

Packing group : III

15 REGULATORY INFORMATION**EC LABELLING :**

- Identification of the hazardous product:

Contains :

Active ingredient(s) :

Bifenthrin : 80 g/l - 20°C

Other substance(s) :

Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

- Symbols and indications of danger:

- HARMFUL (Xn)

- DANGEROUS FOR THE ENVIRONMENT (N)

- R phrases :

R 20/22: Harmful by inhalation and if swallowed.

R 43: May cause sensitization by skin contact.

R 50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- S phrases :

S 35 : This material and its container must be disposed of in a safe way.

S 36/37 : Wear suitable protective clothing and gloves

S 57 : Use appropriate container to avoid environmental contamination.

- Additional phrases :

SP1 : Do not contaminate water with the product or its container. Do not clean application equipment near surface water / Avoid contamination via drains from farmyards and roads

Prescribed phrase on label :

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

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NOTE :

The above information refers to the main regulations specifically applicable to the product described in the MSDS.

The cited basic community texts are being updated and transcribed in national law.

Refer to all applicable international, national and local regulations or provisions.

The user's attention is drawn to the possible existence of additional provisions which complete these regulations.

16 OTHER INFORMATION

Registered trademarks :

Talstar and FMC are registered trademarks of FMC Corporation, USA.

* Update :

This sheet was updated (refer to the date at the top of this page)

Subheadings and text which have been modified since the previous version are followed with an asterisk (*)

This sheet completes the technical sheets but it does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith.

The attention of the user is drawn to the risks possibly incurred by using the product for any other purpose than that for which it was intended.

This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product.

The mandatory regulations mentioned are only intended to help the user to fulfil his obligations regarding the use of hazardous products.

This listing must not be considered exhaustive. It does not exonerate the user from ensuring that other legal obligations than those mentioned do not exist, relating to the use and storage of the product for which he solely is responsible.

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