

**Product Name:** SPITFIRE (TM) Herbicide**Revision Date:** 2013/08/05**Print Date:** 22 Aug 2013

Dow AgroSciences Limited encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## Section 1. Identification of the substance/preparation and of the company/undertaking

### 1.1 Product identifiers

**Product Name**

SPITFIRE™ Herbicide

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Identified uses**

Plant Protection Product

### 1.3 Details of the supplier of the safety data sheet

**COMPANY IDENTIFICATION**

Dow AgroSciences Limited  
A Subsidiary of The Dow Chemical Company  
Latchmore Court, Brand Street  
SG5 1NH Hitchin  
United Kingdom

[SDSQuestion@dow.com](mailto:SDSQuestion@dow.com)

### 1.4 EMERGENCY TELEPHONE NUMBER

**24-Hour Emergency Contact:**

0031 115 694 982

**Local Emergency Contact:**

00 31 115 69 4982

## Section 2. Hazards Identification

### 2.1 Classification of the substance or mixture

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

Xi	R36/37/38	Irritating to eyes, respiratory system and skin.
	R43	May cause sensitization by skin contact.
	R67	Vapours may cause drowsiness and dizziness.
N	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 2.2 Label elements

### Labelling according to EC Directives

#### Hazard Symbol:

- Xi - Irritant.  
N - Dangerous for the environment.

#### Risk Phrases :

- R36/37/38 - Irritating to eyes, respiratory system and skin.  
R43 - May cause sensitization by skin contact.  
R67 - Vapours may cause drowsiness and dizziness.  
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Safety Phrases :

- S2 - Keep out of the reach of children.  
S13 - Keep away from food, drink and animal feeding stuffs.  
S24 - Avoid contact with skin.  
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S35 - This material and its container must be disposed of in a safe way.  
S37 - Wear suitable gloves.  
S46 - If swallowed, seek medical advice immediately and show this container or label.  
S57 - Use appropriate containment to avoid environmental contamination.

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

## 2.3 Other Hazards

No information available.

## Section 3. Composition/information on ingredients

### 3.2 Mixture

This product is a mixture.

CAS-No. / EC-No. / Index	REACH No.	Amount	Component	Classification: REGULATION (EC) No 1272/2008
CAS-No. 81406-37-3 EC-No. 279-752-9 Index 607-272-00-5	—	14.5 %	fluroxypyr-meptyl (ISO)	Aquatic Acute, 1, H400 Aquatic Chronic, 1, H410
CAS-No. 145701-23-1 EC-No. Not available Index 613-230-00-7	—	0.5 %	Florasulam (ISO)	Aquatic Acute, 1, H400 Aquatic Chronic, 1, H410
CAS-No. Not available EC-No. 918-668-5	01- 2119455851- 35	> 30.0 - < 40.0 %	Hydrocarbons, C9, aromatics	Flam. Liq., 3, H226 Asp. Tox., 1, H304 STOT SE, 3, H335 STOT SE, 3, H336 Aquatic Chronic, 2, H411
CAS-No. 57-55-6 EC-No. 200-338-0	01- 2119456809- 23	< 5.0 %	Propylene glycol#	Not classified

## II

CAS-No. / EC-No. / Index	Amount	Component	Classification: 67/548/EEC
<b>CAS-No.</b> 81406-37-3 <b>EC-No.</b> 279-752-9 <b>Index</b> 607-272-00-5	14.5 %	fluroxypyr-meptyl (ISO)	N: R50, R53
<b>CAS-No.</b> 145701-23-1 <b>EC-No.</b> Not available <b>Index</b> 613-230-00-7	0.5 %	Florasulam (ISO)	N: R50, R53
<b>CAS-No.</b> Not available <b>EC-No.</b> 918-668-5	> 30.0 - < 40.0 %	Hydrocarbons, C9, aromatics	R10; Xn: R65; Xi: R37; R66; R67; N: R51/53
<b>CAS-No.</b> 57-55-6 <b>EC-No.</b> 200-338-0	< 5.0 %	Propylene glycol#	Not classified.

# Substance(s) with an Occupational Exposure Limit.

For the full text of the H-Statements mentioned in this Section, see Section 16.

See Section 16 for full text of R-phrases.

## Section 4. First-aid measures

### 4.1 Description of first aid measures

**General advice:** First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.

**Skin Contact:** Take off contaminated clothing. Wash skin with soap and plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Wash clothing before reuse. Shoes and other leather items which cannot be decontaminated should be disposed of properly.

**Eye Contact:** Hold eyes 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 eyes. Call a poison control center or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.

### 4.2 Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), no additional symptoms and effects are anticipated.

### 4.3 Indication of immediate medical attention and special treatment needed

Skin contact may aggravate preexisting dermatitis.

## Section 5. Fire Fighting Measures

### 5.1 Extinguishing Media

To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. General purpose synthetic foams (including AFFF type) or protein foams are preferred if available. Alcohol resistant foams (ATC type) may function.

### 5.2 Special hazards arising from the substance or mixture

**Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen fluoride. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** This material will not burn until the water has evaporated. Residue can burn. May produce flash fire. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. If exposed to fire from another source and water is evaporated, exposure to high temperatures may cause toxic fumes. Dense smoke is produced when product burns.

### 5.3 Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Eliminate ignition sources. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

**Special Protective Equipment for Firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

## Section 6. Accidental Release Measures

**6.1 Personal precautions, protective equipment and emergency procedures:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Keep personnel out of low areas. No smoking in area. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Vapor explosion hazard. Keep out of sewers. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**6.2 Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. Spills or discharge to natural waterways is likely to kill aquatic organisms.

**6.3 Methods and materials for containment and cleaning up:** Contain spilled material if possible. Pump with explosion-proof equipment. If available, use foam to smother or suppress. Small spills: Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Dow AgroSciences for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

## Section 7. Handling and Storage

### 7.1 Precautions for safe handling

#### Handling

**General Handling:** Keep out of reach of children. Keep away from heat, sparks and flame. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Use with adequate ventilation. No smoking, open flames or sources of ignition in handling and storage area. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Electrically ground and bond all equipment. Use of non-sparking or explosion-proof equipment may be necessary, depending upon the type of operation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Other Precautions:** Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage

Store in a dry place. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies. Minimize sources of ignition, such as static build-up, heat, spark or flame.

### 7.3 Specific end uses

Refer to product label.

## Section 8. Exposure Controls / Personal Protection

### 8.1 Control parameters

#### Exposure Limits

Component	List	Type	Value
fluroxypyr-meptyl (ISO)	Dow IHG	TWA	10 mg/m3
Hydrocarbons, C9, aromatics	DNEL-Worker:	Dermal - Systemic Long Term.	25 mg/kg bw/day
	DNEL-Worker:	Inhalation - Systemic Long Term.	100 mg/m3
	DNEL-Consumer:	Dermal - Systemic Long Term.	11 mg/kg bw/day
	DNEL-Consumer:	Inhalation - Systemic Long Term.	32 mg/m3
	DNEL-Consumer:	Oral - Systemic Long Term.	11 mg/kg bw/day
Propylene glycol	Ireland OELV	TWA Particulate.	10 mg/m3
	UK WEL	TWA Particulate.	10 mg/m3
	UK WEL	TWA Total vapour and particulates.	474 mg/m3 150 ppm
	WEEL	TWA Aerosol.	10 mg/m3

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

## 8.2 Exposure controls

### Personal Protection

**Eye/Face Protection:** Use chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent.

**Skin Protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Hand protection:** Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Styrene/butadiene rubber. Viton. Examples of acceptable glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Chlorinated polyethylene. Neoprene. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Respiratory Protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2.

**Ingestion:** Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

### Engineering Controls

**Ventilation:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.

## Section 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical State	Liquid.
Color	White
Odor	Gasoline-like
pH	4.5 (@ 1 %) <i>pH Electrode</i>
Melting Point	Not applicable
Freezing Point	No test data available
Boiling Point (760 mmHg)	No test data available.
Flash Point - Closed Cup	57.8 °C <i>Closed Cup</i>
Flammability (solid, gas)	Not applicable to liquids
Flammable Limits In Air	<b>Lower:</b> No test data available <b>Upper:</b> No test data available
Vapor Pressure	No test data available
Vapor Density (air = 1)	No test data available
Specific Gravity (H <sub>2</sub> O = 1)	No test data available
Solubility in water (by weight)	Emulsion
Partition coefficient, n-octanol/water (log Pow)	No data available for this product. See Section 12 for individual component data.

<b>Autoignition Temperature</b>	No test data available
<b>Decomposition Temperature</b>	No test data available
<b>Kinematic Viscosity</b>	No test data available
<b>Explosive properties</b>	No
<b>Oxidizing properties</b>	No

## 9.2 Other information

**Liquid Density** 0.9861 g/cm<sup>3</sup> @ 20 °C *OECD 109*

## Section 10. Stability and Reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Thermally stable at typical use temperatures.

### 10.3 Possibility of hazardous reactions

Polymerization will not occur.

**10.4 Conditions to Avoid:** Can coagulate if frozen. Active ingredient decomposes at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

**10.5 Incompatible Materials:** Avoid contact with: Strong oxidizers. Addition of chemicals may cause phase separation.

### 10.6 Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Toxic gases are released during decomposition.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

#### Acute Toxicity

##### Ingestion

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product: LD<sub>50</sub>, rat, female > 5,000 mg/kg

##### Aspiration hazard

Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

##### Dermal

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: LD<sub>50</sub>, rat, male and female > 5,000 mg/kg

##### Inhalation

Prolonged exposure is not expected to cause adverse effects. Based on the available data, respiratory irritation was not observed.

As product: LC<sub>50</sub>, 4 h, Aerosol, rat > 5.52 mg/l

No deaths occurred at this concentration.

##### Eye damage/eye irritation

May cause moderate eye irritation which may be slow to heal. May cause slight corneal injury.

##### Skin corrosion/irritation

Brief contact may cause slight skin irritation with local redness. May cause drying and flaking of the skin. Effects may be slow to heal.

##### Sensitization

##### Skin

Has demonstrated the potential for contact allergy in mice.

##### Respiratory

No relevant data found.

### Repeated Dose Toxicity

For the active ingredient(s): Florasulam. In animals, effects have been reported on the following organs: Kidney. For the solvent(s): In animals, effects have been reported on the following organs: Liver. Kidney. Respiratory tract. Blood. Eye. Lung.

### Chronic Toxicity and Carcinogenicity

For the minor component(s): Has caused cancer in laboratory animals. However, the relevance of this to humans is unknown. For the active ingredient(s): Florasulam. For similar active ingredient(s): Fluroxypyr. Did not cause cancer in laboratory animals.

### Developmental Toxicity

For the active ingredient(s): Fluroxypyr 1-methylheptyl ester. Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

### Reproductive Toxicity

For the solvent(s): In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. For the active ingredient(s): In animal studies, did not interfere with reproduction.

### Genetic Toxicology

For the active ingredient(s): For the component(s) tested: In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

## Section 12. Ecological Information

### 12.1 Toxicity

Material is very toxic to aquatic organisms (LC50/EC50/IC50 below 1 mg/L in the most sensitive species). Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

#### Fish Acute & Prolonged Toxicity

LC50, Oncorhynchus mykiss (rainbow trout), flow-through test, 96 h: 18.6 mg/l

#### Aquatic Invertebrate Acute Toxicity

EC50, Daphnia magna (Water flea), semi-static test, 48 h, immobilization: 27 - 35 mg/l

#### Aquatic Plant Toxicity

ErC50, Lemna minor (duckweed), Growth rate inhibition, 7 d: 0.156 mg/l

ErC50, Pseudokirchneriella subcapitata (green algae), Growth rate inhibition, 72 h: 1.730 mg/l

#### Toxicity to Above Ground Organisms

oral LD50, Colinus virginianus (Bobwhite quail): 2,000 mg/kg

contact LD50, Apis mellifera (bees): > 200 micrograms/bee

oral LD50, Apis mellifera (bees): > 215.8 micrograms/bee

#### Toxicity to Soil Dwelling Organisms

LC50, Eisenia fetida (earthworms), 14 d: 320 mg/kg

### 12.2 Persistence and Degradability

Data for Component: **fluroxypyr-meptyl (ISO)**

|| Material is not readily biodegradable according to OECD/EEC guidelines.

#### Stability in Water (1/2-life):

|| 454 d

#### OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
32 %	28 d	OECD 301D Test	fail

|| Theoretical Oxygen Demand: 2.2 mg/mg

Data for Component: **Florasulam (ISO)**

|| Material is expected to biodegrade only very slowly (in the environment). Fails to pass

|| OECD/EEC tests for ready biodegradability.

#### Stability in Water (1/2-life):

|| > 30 d

#### OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
2 %	28 d	OECD 301B Test	fail
Indirect Photodegradation with OH Radicals			
Rate Constant	Atmospheric Half-life	Method	
7.04E-11 cm3/s	1.82 h	Estimated.	
Theoretical Oxygen Demand: 0.85 mg/mg			

Data for Component: **Hydrocarbons, C9, aromatics**

For the major component(s): Material is expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability. For some component(s): Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

Data for Component: **Propylene glycol**

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Biodegradation may occur under anaerobic conditions (in the absence of oxygen).

**OECD Biodegradation Tests:**

Biodegradation	Exposure Time	Method	10 Day Window
81 %	28 d	OECD 301F Test	pass
96 %	64 d	OECD 306 Test	Not applicable

## 12.3 Bioaccumulative potential

Data for Component: **fluroxypyr-meptyl (ISO)**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).  
**Partition coefficient, n-octanol/water (log Pow):** 5.04 Measured  
**Bioconcentration Factor (BCF):** 26; Oncorhynchus mykiss (rainbow trout); Measured

Data for Component: **Florasulam (ISO)**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).  
**Partition coefficient, n-octanol/water (log Pow):** -1.22  
**Bioconcentration Factor (BCF):** 0.8; Fish; Measured

Data for Component: **Hydrocarbons, C9, aromatics**

**Bioaccumulation:** For the major component(s): Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5). For the minor component(s): Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Data for Component: **Propylene glycol**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).  
**Partition coefficient, n-octanol/water (log Pow):** -1.07 Measured  
**Bioconcentration Factor (BCF):** 0.09; Estimated.

## 12.4 Mobility in soil

Data for Component: **fluroxypyr-meptyl (ISO)**

**Mobility in soil:** Expected to be relatively immobile in soil (Koc > 5000).  
**Partition coefficient, soil organic carbon/water (Koc):** 6,200 - 43,000 Henry's Law  
**Constant (H):** 5.5E+00 Pa\*m<sup>3</sup>/mole. Measured

Data for Component: **Florasulam (ISO)**

**Mobility in soil:** Potential for mobility in soil is very high (Koc between 0 and 50).  
**Partition coefficient, soil organic carbon/water (Koc):** 4 - 54 Henry's Law  
**Constant (H):** 4.35E-07 Pa\*m<sup>3</sup>/mole.; 20 °C

Data for Component: **Hydrocarbons, C9, aromatics**

**Mobility in soil:** For the major component(s): Potential for mobility in soil is low (Koc between 500 and 2000).

Data for Component: **Propylene glycol**

**Mobility in soil:** Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process., Potential for mobility in soil is very high (Koc between 0 and 50).  
**Partition coefficient, soil organic carbon/water (Koc):** < 1 Estimated.  
**Henry's Law Constant (H):** 1.2E-08 atm\*m<sup>3</sup>/mole Measured

## 12.5 Results of PBT and vPvB assessment

### Data for Component: fluroxypyr-meptyl (ISO)

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

### Data for Component: Florasulam (ISO)

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

### Data for Component: Hydrocarbons, C9, aromatics

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

### Data for Component: Propylene glycol

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

## 12.6 Other adverse effects

### Data for Component: fluroxypyr-meptyl (ISO)

This substance is not in Annex I of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer.

### Data for Component: Florasulam (ISO)

This substance is not in Annex I of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer.

### Data for Component: Hydrocarbons, C9, aromatics

This substance is not in Annex I of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer.

### Data for Component: Propylene glycol

This substance is not in Annex I of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer.

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

## Section 14. Transport Information

### ADR/RID

#### 14.1 UN number

UN1993

#### 14.2 UN proper shipping name

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.

Technical Name: PETROLEUM NAPHTHA, 1,2,4-TRIMETHYLBENZENE

#### 14.3 Transport hazard class(es)

Hazard Class: 3

#### 14.4 Packing Group

PG III

#### 14.5 Environmental hazards

Environmentally hazardous

**14.6 Special precautions for user**

Special Provisions: no data available

Hazard identification No:30

**ADNR / ADN****14.1 UN number**

UN1993

**14.2 UN proper shipping name**

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.

Technical Name: PETROLEUM NAPHTHA, 1,2,4-TRIMETHYLBENZENE

**14.3 Transport hazard class(es)**

Hazard Class: 3

**14.4 Packing Group**

PG III

**14.5 Environmental hazards**

Environmentally hazardous

**14.6 Special precautions for user**

no data available

**IMDG****14.1 UN number**

UN1993

**14.2 UN proper shipping name**

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.

Technical Name: PETROLEUM NAPHTHA, 1,2,4-TRIMETHYLBENZENE

**14.3 Transport hazard class(es)**

Hazard Class: 3

**14.4 Packing Group**

PG III

**14.5 Environmental hazards**

Marine pollutant

**14.6 Special precautions for user**

EMS Number: F-E,S-E

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**ICAO/IATA****14.1 UN number**

UN1993

**14.2 UN proper shipping name**

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.

Technical Name: PETROLEUM NAPHTHA, 1,2,4-TRIMETHYLBENZENE

**14.3 Transport hazard class(es)**

Hazard Class: 3

**14.4 Packing Group**

PG III

**14.5 Environmental hazards**

Environmentally hazardous

**14.6 Special precautions for user**

no data available

**Section 15. Regulatory Information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****European Inventory of Existing Commercial Chemical Substances (EINECS)**

The components of this product are on the EINECS inventory or are exempt from inventory requirements.

Product Registration Number: MAPP 15101

## 15.2 Chemical Safety Assessment

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

## Section 16. Other Information

### Hazard statement in the composition section

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

### Risk-phrases in the Composition section

R10	Flammable.
R37	Irritating to respiratory system.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

### Revision

Identification Number: 1018110 / 3027 / Issue Date 2013/08/05 / Version: .0

DAS Code: GF-2257

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

*Dow AgroSciences Limited urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.*