



Safety Data Sheet

SHIRO

Preparation Date 09-Feb-2016

Revision date 21-Feb-2017

Revision Number: 3

1. Identification of the substance/mixture and of the company/undertaking

1.1 Identification of the product

Product code HDD01
Product Description: SHIRO
Synonyms Triflurosulfuron-methyl 500 g/kg WG
Pure substance/preparation Preparation

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended use Herbicide
Sector(s) of use Agricultural applications.

1.3 Details of the Supplier of the Safety Data Sheet

Supplier UPL Europe Ltd
The Centre
Birchwood Park
Warrington
WA3 6YN Cheshire
UK
Tel. : +44 (0) 1925 819999
Fax : +44 (0) 1925 856075
E-mail address info@uniphos.com

1.4 Emergency Telephone Number

Emergency telephone number (CARECHEM 24): +44 (0) 1235 239670
United Kingdom NHS no. 111

2. Hazards Identification

2.1 Classification of the mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Human Health

Carcinogenicity Category 2 - H351

Environment

Acute aquatic toxicity Category 1 - H400

Chronic aquatic toxicity Category 1 - H410

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

2.2 Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]



Signal Word

WARNING

Hazard Statements

H351 - Suspected of causing cancer

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P201 - Obtain special instructions before use

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P501 - Dispose of contents/ container in accordance with national regulation

EU Specific Hazard Statements

EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

2.3 Other Hazards

No information available

3. Composition/information on Ingredients

3.2. MIXTURES

Chemical name	EC No	CAS-No	Weight %	Classification (Dir.67/548)	EU - GHS Substance Classification	REACH No.
Triflusulfuron-methyl	-	126535-15-7	40 - 50	-	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Carc. 2; H351	no data available
Sodium dioctyl sulfosuccinate	209-406-4	577-11-7	1 - 5	-	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	no data available

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

4. First aid measures

4.1 Description of first-aid measures

General advice	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
Eye contact	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists, consult a specialist
Skin contact	Wash off immediately with plenty of water If symptoms persist, call a physician
Ingestion	Do NOT induce vomiting Call a physician or poison control center immediately Never give anything by mouth to an unconscious person Rinse mouth with water
Inhalation	Move to fresh air Call a POISON CENTER or doctor if you feel unwell

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

No information available

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Water spray
Carbon dioxide (CO₂)
Foam
Dry powder

Unsuitable extinguishing media High volume water jet

5.2 Special hazards arising from the substance or mixture

Special Hazard Hazardous decomposition products formed under fire conditions:: Carbon dioxide (CO₂), Nitrogen oxides (NO_x)

5.3 Advice for Firefighters

This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation
Use personal protective equipment
Avoid dust formation
Do not breathe dust

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so
Do not allow material to contaminate ground water system
Prevent product from entering drains
Local authorities should be advised if significant spillages cannot be contained

6.3 Methods and material for containment and cleaning up

Recover the product by sweeping up or vacuuming without raising dust.
Sweep up or vacuum spilled material into a labeled waste container. Disposal by a licensed waste disposal contractor.

7. Handling and Storage

7.1 Precautions for Safe Handling

Handling

Provide adequate ventilation

Ensure that eyewash stations and safety showers are close to the workstation location

Hygiene Measures

Use only outdoors or in a well-ventilated area

Remove contaminated clothing and protective equipment before entering eating areas

Wash hands before eating, drinking or smoking

Wash thoroughly after handling

7.2 Conditions for safe storage, including any incompatibilities

Keep out of the reach of children

Keep in properly labelled containers

Keep containers tightly closed in a dry, cool and well-ventilated place

Keep away from heat and sources of ignition

Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.

7.3 Specific end uses

No information available.

8. Exposure Controls/Personal Protection

8.1 Control Parameters

Exposure Limits Apply technical measures to comply with the occupational exposure limits

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2 Exposure Controls

Engineering controls Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Eye protection

Safety glasses with side-shields. (EN166).

Skin protection

Long sleeved clothing.

Hand protection

Nitrile rubber.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained
Do not allow material to contaminate ground water system
Prevent product from entering drains

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	brown	
Physical state	solid, water dispersible granule (WG)	
Odor	Woody	
Property	VALUES	Remarks/ Method
pH	7.1	(1% solution)
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	Not required	
Flammability (solid, gas)	Not flammable	
Specific gravity	0.7 - 0.9 g/mL	
Water solubility	Soluble in water	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	Not expected	
Decomposition temperature	No information available	
Viscosity	Not required	
Oxidizing properties	The substance or mixture is not classified as oxidizing.	
Explosive properties	According to the chemical structure no explosion reaction is expected	

9.2 OTHER INFORMATION

VOC Content	No information available
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10. Stability and Reactivity

10.1 Reactivity

None under normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Protect from moisture
Decomposes slowly on exposure to water
To avoid thermal decomposition, do not overheat
May form explosive mixtures with air

10.5 Incompatible Materials

No materials to be especially mentioned

10.6 Hazardous Decomposition Products

Hydrogen fluoride
Oxides of sulfur

11. Toxicological Information

11.1 Information on Toxicological Effects

Data obtained on this product or a similar product

Acute toxicity

Local effects

Inhalation

There is no data available for this product.

Eye contact

No eye irritation. (rabbit).

Skin contact

No skin irritation. (rabbit).

Ingestion

There is no data available for this product.

LD50 Oral

> 5000 mg/kg (rat)

LD50 Dermal

> 2000 mg/kg (rat)

LC50 Inhalation

> 6.1 mg/L mg/l (rat) (4h)

Chronic toxicity

Skin Corrosion/Irritation

None.

Eye damage/irritation

None.

Sensitization

Not a skin sensitizer.

Carcinogenic effects

Suspected of causing cancer

Mutagenic effects

No information available

Reproductive effects

No information available

STOT - Single Exposure

Not classified.

STOT - Repeated Exposure

Not classified.

12. Ecological Information

12.1 Toxicity

LC50 (96h) fish (*Oncorhynchus mykiss*): 730 mg/L (triflurosulfuron)
EC50 (48h) daphnia magna: 145.8 mg/L
EC50 (120h) algae: 0.93 mg/L
EC50 (14d) aquatic plants (*Lemna gibba*): 0.013 mg/L
EC50 (14d) aquatic plants (*Myriophyllum spicatum*): 0.0043 mg/L

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2 Persistence and Degradability

Not readily biodegradable: Triflurosulfuron methyl

12.3 Bioaccumulative Potential

Does not bioaccumulate: Triflurosulfuron methyl

12.4 Mobility in Soil

No information available.

12.5 Results of PBT and vPvB Assessment

This substance is not considered to be very persistent nor very bioaccumulating (vPvB)

12.6 Other Adverse Effects

No information available.

13. Disposal Considerations

13.1 Waste Treatment Methods

Waste from Residues/Unused Products	Dispose of in accordance with local regulations.
Contaminated packaging	Empty remaining contents. Empty containers should be taken for local recycling, recovery or waste disposal.
EWC waste disposal No	020108 - agrochemical waste containing dangerous substances.
OTHER INFORMATION	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

14. Transport Information

ADR/RID

14.1 UN-No	UN3077
14.2 Proper shipping name	Environmentally hazardous substance, solid, n.o.s. (Triflusulfuron-methyl Mixture)
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental Hazard	DANGEROUS FOR THE ENVIRONMENT
14.6 Special Provisions	274, 335, 375, 601

IMDG/IMO

14.1 UN-No	UN3077
14.2 Proper shipping name	Environmentally hazardous substances, solid n.o.s. (Triflusulfuron-methyl Mixture)
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental Hazard	Marine pollutant
14.6 Special Provisions	274, 335, 966, 967, 969

IATA/ICAO

14.1 UN-No	UN3077
14.2 Proper shipping name	Environmentally hazardous substances, solid n.o.s. (Triflusulfuron-methyl Mixture)
14.3 Hazard class	9
14.4 Packing group	III
14.5 Environmental Hazard	DANGEROUS FOR THE ENVIRONMENT
14.6 Special Provisions	A97, A158, A179, A197

15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Registration n° 17439

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

International Inventories

TSCA	Complies
EINECS/ ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
China	-
AICS	Complies
KECL	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 AICS - Australian Inventory of Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

16. Other Information

Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H318 - Causes serious eye damage

H351 - Suspected of causing cancer

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Revision date 21-Feb-2017**Revision note** Sections updated: 1**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006****Disclaimer**

The information contained is based on our knowledge of the product at the date of publishing.

It applies to the PRODUCT AS SUCH. In case of formulation or mixture, make sure that a new danger will not appear.

Users are advised of possible additional hazards when the product is used in applications for which it was not intended.

This sheet shall only be used and duplicated for prevention and Safety purposes.

For rates and use recommendations, refer to the information displayed on the packaging.

It is the responsibility of the handlers of the product to pass on this safety data sheet to any subsequent persons who will come into contact with the product.

End of Safety Data Sheet