

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

1.1 Product Identifier

Product Name: Niantic
 Product Description: A water dispersible granule formulation of mesosulfuron-methyl and iodosulfuron-methyl-sodium for professional use as an agricultural herbicide.

Chemical description of active substance (s): A product comprising of methyl 2-[(4,6-dimethoxypyrimidin-2-ylcarbamoyl)sulfamoyl]-a-(methanesulfonamido)-p-toluate and sodium ([5-iodo-2-(methoxycarbonyl)phenyl]sulfonyl)carbamoyl(4-methoxy-6-methyl-1,3,5-triazin-2-yl)azanide in a ratio of 5:1 respectively.

Chemical Family: Sulfonylurea (mesosulfuron-methyl), Sulfonylurea (iodosulfuron-methyl-sodium)
 GCPF code: WG (Water Dispersible Granules)

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

Product Use: Agriculture – Herbicide

1.3 Details of the supplier of the safety data sheet

Company: Life Scientific Ltd,
 Block 4,
 Belfield Office Park,
 Beech Hill Road,
 Dublin 4,
 Ireland

Telephone: +353 (0) 1 2832024
 Fax: +353 (0) 1 2832026
 Web: www.lifescientific.com

1.4 Emergency contact information

In case of Emergency: Tel NHS 111

Section 2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin irritation	Category 2	H315
Skin sensitisation	Category 1	H317
Serious eye damage	Category 1	H318
Aquatic Chronic	Category 2	H411

2.2 Label Elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms:



Signal Word:

Danger

Hazard Statements:

H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H411 Toxic to aquatic life with long-lasting effects.

Precautionary Statements:

P102 Keep out of reach of children.
 P261 Avoid breathing spray
 P264 Wash hands thoroughly after handling.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305 + P351+ P338+ P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call POISON CENTER/ doctor.
 P308 + P311 If exposed or concerned, please call POISON CENTRE or doctor / physician.
 P332 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P391 Collect spillage.
 P501 Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for empty, clean containers which can be disposed of as non-hazardous waste.
 EUH208 Contains fatty alcohol ethoxylate alkyl ether. May produce an allergic reaction.
 EUH401 To avoid risks to human health and the environment comply with the instructions for use.
 SP 1 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).
 Spe 3 To protect aquatic organisms respect an unsprayed buffer zone of (5m) to non-agricultural land/surface water bodies.

2.3 Other Hazards

None Known

Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

No substances fulfil the criteria set out in Annex II, Part A of the REACH Regulation (EC) No 1907/2006.

3.2 Mixtures

Chemical Name	CAS No	EC No	Classification (Regulation(EC) No 1272/2008)	Concentration (% w/w)
Mesosulfuron methyl	208465-21-8	606-653-3	Aqua. Acute 1, H400	2 - 5
Iodosulfuron-methyl-sodium	144550-36-7	-	Aqua. Acute 1, H400 Aquatic Chronic 1, H410	< 2
Solvent naphtha, heavy aromatic	64742-94-5	265-198-5	Aspiration hazard, 1, H304 Aquatic Chronic 2, H411	2.5 – 25.0

Fatty alcohol ethoxylate alkyl ether	345642-79-7 or 1492044-51-5	-	Skin sensitisation, 1, H317 Eye damage, 1, H318 Aquatic chronic, 2, H411	5.0 – 10.0
Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt*	68425-94-5	-	Eye irritation, 2, H319	5.0 – 15.0
Tetrapropylene benzene sulfonate, calcium salt	11117-11-6 (Benzenesulfonic acid, dodecyl-, branched, calcium salts) 78-83-1 (isobutanol)	234-360-7 (Benzenesulfonic acid, dodecyl-, branched, calcium salts) 201-148-0 (isobutanol)	Flam liq, 3, H226 Acute tox, 4, H312 Skin irritation, 2, H315 Eye damage, 1, H318 STOT SE, 3, H335 STOT SE, 3, H336 Aquatic chronic, 2, H411	1 – 25.0

Section 4. FIRST AID MEASURES

4.1 Description of first aid measures

General information:	In the event of any complaints or symptoms, avoid further exposure. Treat symptomatically. If unwell, consult a physician showing the product container, label or this safety data sheet.
Ingestion:	DO NOT induce vomiting unless directed to do so by a Poison Control Centre. Never give anything by mouth to an unconscious person. Rinse mouth with plenty of water. Consult a physician or Poison Control Centre immediately.
Skin contact:	Remove contaminated clothing immediately. Wash immediately with plenty of soap and water. Consult a physician or Poison Control Centre immediately.
Eye contact:	Remove contact lenses if present. Rinse immediately with plenty of water, with the eyelid open for at least 15 minutes. Consult a physician or Poison Control Centre immediately.

4.2 Most important symptoms and effects, both acute and delayed

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. There is no specific antidote.

Section 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

For small fires:	Use water spray, dry chemical, alcohol-resistant foam or carbon dioxide.
For large fires:	Use alcohol-resistant foam or water spray. Avoid using a solid water stream as it may cause the fire to scatter or spread.

5.2 Special hazards arising from the substance or mixture

In the event of fire the following may be released: Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Hydrogen iodide (HI), Carbon monoxide (CO), Sulphur oxides, Nitrogen oxides (NOx).

5.3 Advice for firefighters

Wear self-contained breathing apparatus with full face shield. Fight fire from a safe distance and a protected location. Do not allow run-off from firefighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

Section 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use appropriate personal protective equipment, see section 8. For safe handling and storage, see section 7.

6.2 Environmental precautions

Prevent further leaking or spillage if safe to do so. Prevent entry into sewers and public waters. In the event of a major spillage, contact an expert immediately. Make provisions to collect extinguishing water after fires. If the product contaminates rivers, lakes or drains, notify the UK Environment Agency (Environment Incident Hotline 0800 80 70 60).

6.3 Methods and materials for containment and cleaning up

Contain spillage. Use non-combustible absorbent material to absorb spillage and place in container for disposal according to local/national legislation.

6.4 Reference to other sections

See Section 7 for information on handling and storage and Section 8 for information on PPE

Section 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

No special technical protective measures required. No special handling advice required. Read label before use. DO NOT eat, drink or smoke during use. Avoid contact with skin and eyes. If on skin wash with plenty of water. Take off contaminated clothing and wash it before reuse.

7.2 Conditions for safe storage, including any incompatibilities

No special storage conditions required. Keep containers tightly closed in a cool, dry and well-ventilated area. Keep out of reach of children. Keep separate from food, drink and animal feed.

7.3 Specific end use(s)

Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

Section 8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

Component	Exposure Limit	Value Type	Source
Fumed silica, amorphous, silicon dioxide	2.4 mg/m ³ (Respirable Dust) 6.0 mg/m ³ (Total Inhalable Dust)	TWA value	ELV (IE)
Kaolin	2 mg/m ³	OELV – 8 hrs (TWA)	Ireland. List of Chemical Agents and Occupational Exposure Limit Values - Schedule 1
Sodium hydroxide	2 mg/m ³	OELV – 15 min (STEL)	Ireland. List of Chemical Agents and Occupational Exposure Limit Values - Schedule 1
Polyvinylpyrrolidone	10 mg/m ³	TWA value	EH40 (UK)
Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt	4 mg/m ³	TWA value	EH40 (UK)

8.2 Exposure controls

Respiratory protection: Respiratory protection is not required under anticipated circumstances of exposure. Use self-contained breathing apparatus in case of emergency spills or when exposure levels are unknown.

Skin protection: Wear suitable chemical-resistant coveralls (Category 3, Type 5). In case of high exposure risk consider a higher level of protective suit. Where possible wear two layers of clothing. Decontaminate protective clothing before re-use.

Hand protection:	Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness of 0.4 mm). Wash when contaminated and dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently.
Eye protection:	Eye protection should be worn and certified to EN 166, Field of Use = 5 or equivalent.
Engineering measures:	Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.
Hygiene measures:	When using, DO NOT eat, drink or smoke. Wash hands and face with soap and water before breaks. Shower at the end of the workday. Decontaminate protective clothing before re-use.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form	Granules (water dispersible)
Colour	Brown
Odour	Aromatic

Chemical properties

pH (at 23 °C)	8.9 – 9.5 at 10%	
Density (g/cm ³)	0.635-0.745	
Solubility in water	Dispersible	
Autoignition (°C)	264	
Oxidising properties	Not oxidising	
Impact Sensitivity	Not impact sensitive	
Combustion number	CN ² short flaring without spreading	
Density (g/cm ³)	1.057 at 20 °C	
Log P octanol/water at 20°C	Mesosulfuron-methyl:	log Pow: -0.48
	Iodosulfuron-methyl-sodium:	log Pow: -0.7
	Mefenpyr-diethyl:	log Pow: 3.83 at 21 °C

9.2 Other Information

None

Section 10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical Stability

This mixture is stable at the handling and storage conditions recommended in Section 7.

10.3 Possibility of hazardous reactions

This mixture produces no hazardous reactions when stored at the handling and storage conditions recommended in Section 7.

10.4 Conditions to avoid

Avoid: Heat, direct sunlight.

10.5 Incompatible material

Store in the original container.

10.6 Hazardous decomposition products

No decomposition products expected under normal conditions.

Section 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

LD ₅₀ oral rat:	>2000 mg/kg
LC ₅₀ inhalation rat:	> 1.1 mg/L (Exposure time 4h) Results determined in liquid aerosol form, highest attainable concentration. No deaths.
LD ₅₀ dermal rat:	> 5000 mg/kg.
Eye irritation rabbit:	Severe irritation
Skin irritation rabbit:	Irritating
Sensitisation mouse:	Non-sensitisation

Mesosulfuron-methyl, Iodosulfuron-methyl-sodium and Mefenpyr-diethyl

Repeated dose toxicity:	Did not cause specific target organ toxicity in experimental animal studies.
Mutagenicity:	Not mutagenic or genotoxic in either in vitro or in vivo tests.
Carcinogenicity:	Not carcinogenic in lifetime feeding studies (rats and mice).
Reproductive toxicity:	Did not cause reproductive toxicity in a two-generation study in rats.

Mesosulfuron-methyl and Iodosulfuron-methyl-sodium

Developmental toxicity:	Did not cause developmental toxicity in rats and rabbits.
-------------------------	---

Mefenpyr-diethyl

Developmental toxicity:	Resulted in developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Mefenpyr-diethyl are related to maternal toxicity.
-------------------------	--

Section 12. ECOLOGICAL INFORMATION

12.1 Toxicity

LC ₅₀ Oncorhynchus mykiss (96 h):	7.5 g/L
EC ₅₀ Daphnia magna (48 h):	13.1 mg/L
EC ₅₀ Pseudokirchneriella subcapitata (72 h):	2.4 mg/L

12.2 Persistence and degradability

Mesosulfuron-methyl

Biodegradability:	Not rapidly biodegradable
Koc:	92

Iodosulfuron-methyl-sodium

Biodegradability:	Not rapidly biodegradable
Koc:	45

Mefenpyr-diethyl

Biodegradability:	Not rapidly biodegradable
Koc:	625

12.3 Bioaccumulative potential

Mesosulfuron-methyl, Iodosulfuron-methyl-sodium and Mefenpyr-diethyl

Bioaccumulation:	Does not bioaccumulate
------------------	------------------------

Mefenpyr-diethyl

Bioconcentration factor:	232
--------------------------	-----

12.4 Mobility in soil

Mesosulfuron-methyl

Moderately mobile in soils

Iodosulfuron-methyl-sodium

Mobile in soils

Mefenpyr-diethyl
Slightly mobile in soils

12.5 Results of PBT and vPvB assessment

Mesosulfuron-methyl, Iodosulfuron-methyl-sodium and Mefenpyr-diethyl

Substance is not considered to be persistent, bioaccumulative and toxic (PBT). Substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

None

Section 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal procedures: Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible, recycling is preferred to disposal or incineration. If recycling is not practical, dispose of in compliance with local regulations.

Contaminated packaging: Empty remaining contents. Triple rinse containers. Do not re-use empty containers. Empty containers should be taken for local recycling or waste disposal.

Section 14. TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO / IATA for air transport (ADR 2013 - IMDG 2012 - ICAO / IATA 2013).

14.1 UN Number

3077

14.2 UN proper shipping name

Environmentally hazardous substance, solid, N.O.S., (IODOSULFURON-METHYL SODIUM, MESOSULFURONMETHYL, SOLVENT NAPHTHA (PETROLEUM) HEAVY AROMATIC MIXTURE).

14.3 Transport hazard class(es)

9

14.4 Packing group

III

14.5 Environmental hazards

Marine pollutant, Dangerous to the environment

14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC code

No Information available

Section 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture relating to the classification and labelling contained in Section 3.

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

The mixture contains no ' substances of very high concern "(SVHC) published by the European Chemicals Agency (ECHA) under Article 57 of REACH <http://echa.europa.eu/uk/candidate-list-table>

15.2 Chemical safety assessment

None

Section 16. OTHER INFORMATION

Full list of relevant Hazard statements that were not given in full in sections 2 and 3.

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic organisms.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

The information presented in this SDS is correct to the best of our knowledge, information and belief at the date of its publication. However, the information given is designed only as a guidance for methods of handling, storage, use, transportation and disposal of the product, and is not considered to be a warranty or quality specification. Life Scientific Limited shall not be held liable for any loss or damage resulting from the handling, storage, use or disposal of the product. The information contained in this SDS relates only to this specific product and may not be valid if this product is used in combination with any other products.

First Issued: 02.12.2016
Current Issuance: 18.04.2019