

Version 4.0 (replaces: Version 3.0) Revision Date 28.01.2015

Ref. 130000107279

This Safety Data Sheet adheres to the standards and regulatory requirements of the Republic of Ireland and may not meet the regulatory requirements of other countries.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	: PRESITE [®] MAX SX
Synonyms	: C12656807 DPX-KAZ22 45.7SG

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

Use of the Substance/Mixture : Herbicide

1.3. Details of the supplier of the safety data sheet

Company	: Du Pont (UK) Limited Wedgwood Way Stevenage, Herts. SG1 4QN United Kingdom
Telephone	: +44 (0) 1438 734 000
E-mail address	: sds-support@che.dupont.com
1.4. Emergency telephone numb	er
Emergency telephone number	 +(353)-19014670 Poison Centres may only possess information required for products in accordance with Regulation (EC) No 1272/2008 and national legislation.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

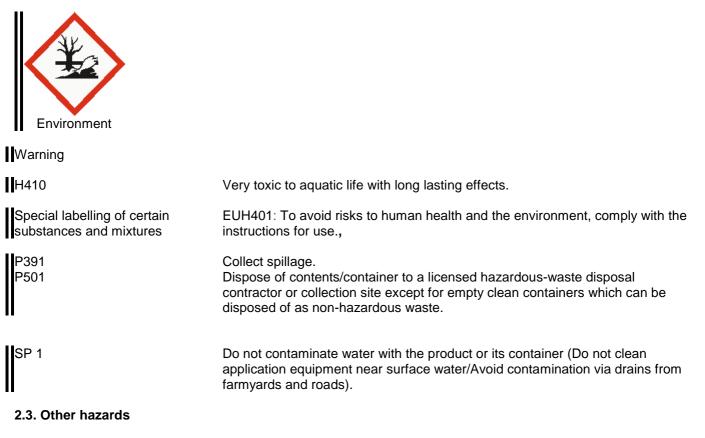
Acute aquatic toxicity, Category 1 Chronic aquatic toxicity, Category 1	H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects.
Dangerous for the environment	R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements



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This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Registration number	Classification	Classification according to	Concentration
	according to	Regulation (EU) 1272/2008	(% w/w)
	Directive 67/548/EEC	(CLP)	

Thifensulfuron methyl (CAS-No.79277-27-3)

	/		
	N;R50/53	Aquatic Acute 1; H400	42.9 %
		Aquatic Chronic 1; H410	

Metsulfuron methyl (CAS-No.74223-64-6)

 (M-Factor : 1,000[Acute] 1,000[Chronic])
 Aquatic Acute 1; H400
 2.9 %

 N;R50/53
 Aquatic Chronic 1; H410
 2.9 %

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Sodium carbonate (CAS-No.497-19-8) (EC-No.207-838-8)

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	Xi;R36		>= 10 - < 15 %

The above products are REACH compliant; Registration number(s) may not be provided because substance(s) are exempted, not yet registered under REACH or are registered under another regulatory process (biocide uses, plant protection products), etc.

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	:	Never give anything by mouth to an unconscious person. For specialist advice contact the National Poisons Information Service. Healthcare Professionals: (01) 809 2566 or (01) 837 9964 (24h per day – 365 days per year). Public Poisons Information Line: (01) 809 2166 (8am-10pm).
Inhalation	:	Move to fresh air. Consult a physician after significant exposure. Artificial respiration and/or oxygen may be necessary.
Skin contact	:	Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. In the case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before re-use.
Eye contact	:	If easy to do, remove contact lens, if worn. Hold eye open and rinse slowly and gently with water for 15-20 minutes. If eye irritation persists, consult a specialist.
Ingestion	:	Obtain medical attention. DO NOT induce vomiting unless directed to do so by a physician or poison control center. If victim is conscious: Rinse mouth with water.
4.2. Most important sym	ptoms a	and effects, both acute and delayed
Symptoms	:	No information available.
4.3. Indication of any imi	mediate	medical attention and special treatment needed
Treatment	:	Treat symptomatically.
CTION 5: Firefighting mea	sures	
5.1. Extinguishing media	1	
Suitable extinguishing me	dia :	Water spray, Foam, Dry chemical, Carbon dioxide (CO2)
Extinguishing media which shall not be used for safet		High volume water jet, (contamination risk)

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5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	Hazardous decomposition products formed under fire conditions. Carbon dioxide (CO2) Nitrogen oxides (NOx)
5.3. Advice for firefighters		
Special protective equipment for firefighters	:	Wear full protective clothing and self-contained breathing apparatus.
Further information		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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Control access to area. Keep people away from and upwind of spill/leak. Avoid dust formation. Avoid breathing dust. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8.

6.2. Environmental precautions

Environmental precautions : Prevent further leakage or spillage if safe to do so. Use appropriate container to avoid environmental contamination. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. If the spill area is porous, the contaminated material must be collected for subsequent treatment or disposal. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and materials for containment and cleaning up

 Methods for cleaning up
 Clean-up methods - small spillage Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean-up methods - large spillage Avoid dust formation. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13). If spill area is on ground near valuable plants or trees, remove 5 cm of top soil after initial clean-up.
 Other information
 Never return spills in original containers for re-use. Dispose of in accordance

r information : Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

6.4. Reference to other sections

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For personal protection see section 8., For disposal instructions see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on protection
against fire and explosion:Keep away from heat and sources of ignition. Avoid dust formation in confined
areas. During processing, dust may form explosive mixture in air.

7.2. Conditions for safe storage, including any incompatibilities

:	Keep away from food, drink and animal feedingstuffs. Store in a place accessible by authorized persons only. Store in original container. Keep in properly labelled containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.
:	No special restrictions on storage with other products.
:	Stable under recommended storage conditions.
	:

7.3. Specific end use(s)

Plant protection products subject to Regulation (EC) No 1107/2009.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

If sub-section is empty then no values are applicable.

8.2. Exposure controls

Engineering measures	: Ensure adequate ventilation, especially in confined areas. Provide for appropriate exhaust ventilation and dust collection at machinery.
Eye protection	: Safety glasses with side-shields conforming to EN166
Hand protection	 Material: Nitrile rubber Glove thickness: 0.3 mm Glove length: Standard glove type. Protection index: Class 6 Wearing time: > 480 min The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves. The break through time depends amongst other things on the material, the thickness and the type of
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	glove and therefore has to be measured for each case. The exact break through time can be obtained from the protective glove producer and this has to be observed. Gloves must be inspected prior to use. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Gauntlets shorter than 35 cm long shall be worn under the combination sleeve. Before removing gloves clean them with soap and water.
Skin and body protection	: Manufacturing and processing work: Full protective clothing Type 5 (EN 13982- 2)
	Mixer and loaders must wear: Full protective clothing Type 5 + 6 (EN ISO 13982-2 / EN 13034) Rubber apron Nitrile rubber boots (EN 13832-3 / EN ISO 20345).
	Spray application - outdoor: Tractor / sprayer with hood: No personal body protection normally required.
	Tractor / sprayer without hood: Low application: Full protective clothing Type 6 (EN 13034) Nitrile rubber boots (EN 13832-3 / EN ISO 20345).
	Backpack / knapsack sprayer: Full protective clothing Type 4 (EN 14605) Nitrile rubber boots (EN 13832-3 / EN ISO 20345).
	The permeation resistance of the fabric must be verified independently of the « type » protection recommended, to ensure an appropriate performance level of the material adequate to the corresponding agent and type of exposure. To optimize the ergonomy it may be recommended to use cotton underwear when wearing some fabrics. Take advice from supplier. Garment materials that are resistant to both water vapour and air will maximise wearing comfort. Materials should be robust to maintain the integrity and barrier in use.
	When exceptional circumstances would require an access to the treated area before the end of re-entry periods, wear full protective clothing Type 6 (EN 13034), nitrile rubber gloves class 2 (EN 374) and nitrile rubber boots (EN 13832-3 / EN ISO 20345).
Protective measures	: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated. Only protected handlers may be in the area during application.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing. Keep working clothes separately. Contaminated work clothing should not be allowed out of the workplace. Wash hands and face before breaks and immediately after handling the product. When using do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. For environmental protection remove and wash all contaminated protective equipment before re-use. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing.
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	Dispose of rinse water in accordance with local and national regulations.
Respiratory protection	: Manufacturing and processing work: Half mask with a particle filter FFP1 (EN149)
	Mixer and loaders must wear: Half mask with a particle filter FFP1 (EN149)
	Spray application - outdoor: Low application: Tractor / sprayer with hood: No personal respiratory protective equipment normally required.
	Tractor / sprayer without hood: Half mask with a particle filter FFP1 (EN149)
	Backpack / knapsack sprayer: Half mask with a particle filter FFP1 (EN149)
CTION 9: Physical and chemi	cal properties
9.1. Information on basic phy	ysical and chemical properties
Form	: solid, granular
Colour	: brown, light brown
Odour	: slight
Odour Threshold	: not determined
Melting point/range	: Not available for this mixture.
Flash point	: Not applicable
Flammability (solid, gas)	: Does not sustain combustion.
Thermal decomposition	: Not available for this mixture.
Auto-ignition temperature	: Test Type : Auto-ignition temperature, Not available for this mixture.
Oxidizing properties	: The product is not oxidizing.
Explosive properties	: Not explosive
Lower explosion limit/ lower flammability limit	: Not available for this mixture.
Upper explosion limit/ upper flammability limit	: Not available for this mixture.
Vapour pressure	: Not available for this mixture.
Relative density	: Not available for this mixture.
Bulk density	: ca. 690 kg/m3 , packed

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Partition coefficient: n- octanol/water	: Not applicable
Viscosity, dynamic	: Not applicable
Relative vapour density	: Not available for this mixture.
Evaporation rate	: Not available for this mixture.
9.2. Other information	
Physchem./other information	: No other data to be specially mentioned.
SECTION 10: Stability and reactiv	/ity
10.1. Reactivity	: No hazards to be specially mentioned.
10.2. Chemical stability	: The product is chemically stable under recommended conditions of storage, use and temperature.
10.3. Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use. Polymerization will not occur. No decomposition if stored and applied as directed.
10.4. Conditions to avoid	: Exposure to moisture Decomposes slowly on exposure to water. To avoid thermal decomposition, do not overheat. Under severe dusting conditions, this material may form explosive mixtures in air.
10.5. Incompatible materials	: No materials to be especially mentioned.
10.6. Hazardous decomposition products	: Sulphur oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

LD50 / Rat : > 5,000 mg/kg Method: Fixed Dose Method Information source: Internal study report The toxicological data has been taken from products of similar composition.

Acute inhalation toxicity

- Thifensulfuron methyl LC50 / 4 h Rat : > 7.9 mg/l
- Metsulfuron methyl LC50 / 4 h Rat : > 5.3 mg/l

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Skin irritation

Rabbit Result: No skin irritation Method: OECD Test Guideline 404 (Data on the product itself) The toxicological data has been taken from products of similar composition.

Eye irritation

Rabbit Result: No eye irritation Method: OECD Test Guideline 405 (Data on the product itself) The toxicological data has been taken from products of similar composition.

Sensitisation

Guinea pig Maximisation Test (GPMT) Result: Animal test did not cause sensitization by skin contact. Method: US EPA Test Guideline OPPTS 870.2600 Information source: Internal study report The toxicological data has been taken from products of similar composition.

Repeated dose toxicity

 Thifensulfuron methyl The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

Oral - feed multiple species Reduced body weight gain

Oral - feed Rat Increase in blood urea nitrogen, altered hematology

Metsulfuron methyl
 The following effects occurred

The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

Oral Rat Exposure time: 90 d Reduced body weight gain, Liver effects

Dermal Rabbit Exposure time: 21 d NOAEL: 125 mg/kg Drying of skin, Cracking of skin, Skin irritation

Oral Rat Reduced body weight gain, Organ weight changes, Liver

Dermal Rabbit Skin irritation



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Mutagenicity assessment

- Thifensulfuron methyl Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Animal testing did not show any mutagenic effects.
- Metsulfuron methyl Animal testing did not show any mutagenic effects. Did not cause genetic damage in cultured bacterial cells. Genetic damage in cultured mammalian cells was observed in some laboratory tests but not in others.

Carcinogenicity assessment

- Thifensulfuron methyl Animal testing did not show any carcinogenic effects.
- Metsulfuron methyl Not classifiable as a human carcinogen. Did not show carcinogenic effects in animal experiments.

Toxicity to reproduction assessment

- Thifensulfuron methyl No toxicity to reproduction Animal testing showed no reproductive toxicity.
- Metsulfuron methyl No toxicity to reproduction Animal testing did not show any effects on fertility.

Assessment teratogenicity

- Thifensulfuron methyl 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.
- Metsulfuron methyl
 Animal testing showed no developmental toxicity.

Further information

Information given is based on data on the components and the toxicology of similar products.

STOT - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

The mixture does not have properties associated with aspiration hazard potential.

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SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish

static test / LC50 / 96 h / Oncorhynchus mykiss (rainbow trout): > 120 mg/l Method: OECD Test Guideline 203 Information source: Internal study report The toxicological data has been taken from products of similar composition.

Toxicity to aquatic plants

EbC50 / 72 h / Pseudokirchneriella subcapitata (green algae): 0.54 mg/l Method: OECD Test Guideline 201 Information source: Internal study report The toxicological data has been taken from products of similar composition.

Toxicity to aquatic invertebrates

static test / EC50 / 48 h / Daphnia magna (Water flea): > 120 mg/l Method: OECD Test Guideline 202 Information source: Internal study report The toxicological data has been taken from products of similar composition.

Chronic toxicity to fish

 Metsulfuron methyl NOEC / 21 h / Oncorhynchus mykiss (rainbow trout): 68 mg/l

Chronic toxicity to aquatic Invertebrates

 Thifensulfuron methyl NOEC / 28 d / Americamysis bahia (mysid shrimp): 7.93 mg/l

EC50 / 21 d / Daphnia magna (Water flea): > 340 mg/l Information source: Internal study report

NOEC / 21 d / Daphnia magna (Water flea): > 340 mg/l

 Metsulfuron methyl NOEC / 21 h / Daphnia magna (Water flea): 100 mg/l

12.2. Persistence and degradability

Biodegradability

Not readily biodegradable. Estimation based on data obtained on active ingredient.

12.3. Bioaccumulative potential

Bioaccumulation

Does not bioaccumulate. Estimation based on data obtained on active ingredient.

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12.4. Mobility in soil

Mobility in soil

Under actual use conditions the product has a low potential of mobility in soil.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). / This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

12.6. Other adverse effects

Additional ecological information

No other ecological effects to be specially mentioned

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

SECTION 13: Disposal considerations 13.1. Waste treatment methods : In accordance with local and national regulations. Must be incinerated in a Product suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate ponds, waterways or ditches with chemical or used container. Contaminated packaging : Do not re-use empty containers. **SECTION 14: Transport information** ADR 14.1. UN number: 3077 14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Thifensulfuron-methyl, Metsulfuron methyl) 14.3. Transport hazard class(es): 9 14.4. Packing group: Ш 14.5. Environmental hazards: For further information see Section 12. 14.6. Special precautions for user: Tunnel restriction code: (E) IATA C 14.1. UN number: 3077 14.2. UN proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Thifensulfuron-methyl, Metsulfuron methyl) 14.3. Transport hazard class(es): 9 14.4. Packing group: Ш 14.5. Environmental hazards : For further information see Section 12. 14.6. Special precautions for user: DuPont internal recommendations and transport guidance: ICAO / IATA cargo aircraft only 12/14

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IMDG

14.1. UN number:		
		3077
14.2. UN proper shippi	ng name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Thifensulfuron-methyl, Metsulfuron methyl)
14.3. Transport hazard	class(es):	9
14.4. Packing group:	~ /	III
14.5. Environmental ha	zards :	Marine pollutant
14.6. Special precautio no data available		
14.7. Transport in bul Not applicable	k according to Ar	nnex II of MARPOL 73/78 and the IBC Code
CTION 15: Regulatory in	nformation	
CTION 15: Regulatory in		regulations/legislation specific for the substance or mixture

A Chemical Safety Assessment is not required for this/these products The mixture is registered as a plant protection product under Regulation (EC) No. 1107/2009. Refer to the label for exposure assessment information.

SECTION 16: Other information

Text of R-phrases mentioned in Section 3

R36 R50/53	Irritating to eyes. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	
Full text of H-Statements referred to under section 3.		
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
Other information	professional use	
Abbreviations and acronyms		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute toxicity estimate	
CAS-No.	Chemical Abstracts Service number	
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CLP	Classification, Labelling and Packaging
EbC50	Concentration at which 50% reduction of biomass is observed
EC50	Median effective concentration
EN	European Norm
EPA	Environmental Protection Agency
ErC50	Concentration at which a 50% inhibition of growth rate is observed
EyC50	Concentration at which 50 % inhibition of yield is observed
IÁTA C	International Air Transport Association (Cargo)
IBC	International Bulk Chemical Code
ICAO	International Civil Aviation Organization
ISO	International Standard Organization
IMDG	International Maritime Dangerous Goods
LC50	Median Lethal Concentration
LD50	Median Lethal Dose
LOEC	Lowest Observed Effect Concentration
LOEL	Lowest observed effect level
MARPOL	International Convention for the Prevention of Marine Pollution from Ships
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No observed adverse effect level
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
OPPTS	Office of Prevention, Pesticides and Toxic Substances
PBT	Persistent, Bioaccumulative and Toxic
STEL	Short term exposure limit
TWA	Time Weighted Average (TWA):
vPvB	very Persistent and very Bioaccumulative

Further information

Take notice of the directions of use on the label.

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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.