This Safety Data Sheet adheres to the standards and regulatory requirements of the European Community 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 : DPX-NRJ67 PX
Synonyms : B12267440

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 : FMC International Switzerland Sàrl
Chemin du Pavillon 2
1218 Le Grand-Saconnex
Switzerland
E-mail address : SDS.Ronland@fmc.com

1.4. Emergency telephone number

Medical emergencies:
Austria: +43 1 406 43 43
Belgium: +32 70 245 245
Bulgaria: +359 2 9154 409
Cyprus: 1401
Czech Republic: +420 224 919 293
+420 224 915 402
Denmark: +45 82 12 12 12
France: +33 (0) 1 45 42 59 59
Finland: +358 9 471 977
Greece: 30 210 77 93 777
Hungary: +36 80 20 11 99
Ireland (Republic): +352 1 809 2166
Italy: +39 02 6610 1029
Lithuania: +370 523 62052
+370 687 53378
Luxembourg: +352 8002 5500
Netherlands: +31 30 274 88 88
Norway: +47 22 591300
Poland: +48 22 619 66 54
+48 22 619 08 97
Portugal: 808 250 143 (in Portugal only)
+351 21 330 3284
Romania: +40 21318 3606
Slovakia: +421 2 54 77 4 166
Slovenia: +386 41 650 500
Spain: +34 91 562 04 20
Sweden: +46 08-331231
112
Switzerland: 145
United Kingdom: 0870 600 6266 (in the UK only)
U.S.A. & Canada: +1 800 / 331-3148 (ProPharma)
All other countries: +1 651 / 632-6793 (ProPharma - Collect)

For fire, leak, spill or other accident emergencies:
U.S.A.: +1 800 / 424 9300 (CHEMTREC)
All other countries: +1 703 / 527 3887 (CHEMTREC - Collect)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Dangerous for the environment

R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Special labelling of certain substances and mixtures	To avoid risks to man and the environment, comply with the instructions for use.
S 2	Keep out of the reach of children.
S13	Keep away from food, drink and animal feedingstuffs.
S20/21	When using do not eat, drink or smoke.
S35	This material and its container must be disposed of in a safe way.
S57	Use appropriate container to avoid environmental contamination.
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).

2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

Registration number	Classification according to Directive 67/548/EEC	Classification according to Regulation (EU) 1272/2008 (CLP)	Concentration
Thifensulfuron methyl (CAS-No.79277-27-3)			
	N;R50/53	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	54,5 %
Metsulfuron methyl (CAS-No.74223-64-6)			
	N;R50/53	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	16,4 %
Alkylnaphthalenesulfonic acid, sodium salt/formaldehyde polycondensate			
	Xi;R36/38	Skin Irrit. 2; H315 Eye Irrit. 2; H319	1,1 %

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.

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 : Rinse thoroughly with plenty of water, also under the eyelids. Consult a physician.

: 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 symptoms and effects, both acute and delayed

Symptoms : No cases of human intoxication are known and the symptoms of experimental intoxication are not known.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray, Foam, Dry chemical, Carbon dioxide (CO2)

Extinguishing media which shall not be used for safety reasons : High volume water jet, (contamination risk)

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	:	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Prevent fire extinguishing water from contaminating surface water or the ground water system.
	:	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	:	Do not flush into surface water or sanitary sewer system. 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. Knock down dust with water spray jet. 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 with local regulations.

6.4. Reference to other sections

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 safe handling	:	Provide appropriate exhaust ventilation at places where dust is formed. Wear personal protective equipment. Use only according to our recommendations. Use only clean equipment. Do not breathe vapours or spray mist. Provide adequate ventilation. For personal protection see section 8. Wash contaminated clothing before re-use. Wash hands before breaks and immediately after handling the product. Prepare the working solution as given on the label(s) and/or the user instructions. Use prepared working solution as soon as possible - Do not store. Avoid exceeding of the given occupational exposure limits (see section 8).
Advice on protection against fire and explosion	:	Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat and sources of ignition. Avoid dust formation in confined areas. Dust may form explosive mixture in air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	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. Keep away from food, drink and animal feedingstuffs.
Advice on common storage	:	No special restrictions on storage with other products.
Storage temperature	:	< 40 °C
Other data	:	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.
Eye protection	:	Safety glasses with side-shields conforming to EN166
Hand protection	:	Material: Nitrile rubber Glove thickness: 0,3 mm Glove length: Gauntlets of 35 cm long or longer. Wearing time: > 480 min 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.

		Gloves must be inspected prior to use. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Before removing gloves clean them with soap and water. The break through time depends amongst other things on the material, the thickness and the type of 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.
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) Field and greenhouse application: Spray application - outdoor: Tractor / sprayer with hood: No personal body protection normally required. Tractor / sprayer without hood: Low application (horticulture, field crops): Full protective clothing Type 4 (EN 14605) Spray application - indoor: Motorized greenhouse sprayer: Full protective clothing Type 4 (EN 14605) Low application (horticulture, field crops): Mechanical automatized spray application in closed tunnel: No personal body protection normally required.
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. 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. Dispose of rinse water in accordance with local and national regulations. Wash hands before breaks and at the end of workday.
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) Field and greenhouse application: Spray application - outdoor: Tractor / sprayer with hood: No personal respiratory protective equipment normally required. Tractor / sprayer without hood: Low application (horticulture, field crops): Half mask with a particle filter FFP1 (EN149) Spray application - indoor: Low application (horticulture, field crops): Half mask with a particle filter P1 (EN 143). Mechanical automatized spray application in closed tunnel: No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	: solid, dry, free flowing granules
Colour	: light cream, beige
Odour	: none
Odour Threshold	: not determined
pH	: Not available for this mixture.
Melting point/range	: Not available for this mixture.

Boiling point/boiling range	: not applicable
Flash point	: not applicable
Auto-ignition temperature	: Not available for this mixture.
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.
Relative density	: Not available for this mixture.
Water solubility	: dispersible
Partition coefficient: n-octanol/water	: Not available for this mixture.
Viscosity, dynamic	: Not available for this mixture.
Evaporation rate	: Not available for this mixture.

9.2. Other information

Phys.-chem./other information	: No other data to be specially mentioned.

SECTION 10: Stability and reactivity

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	: Dust may form explosive mixture in air. No decomposition if stored and applied as directed. 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	: Carbon oxides Sulphur oxides nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

- Thifensulfuron methyl
  LD50 / rat : > 5 000 mg/kg

- Metsulfuron methyl
  LD50 / rat : > 5 000 mg/kg

Acute inhalation toxicity

- Thifensulfuron methyl
  LC50 / 4 h rat : > 7,9 mg/l

- Metsulfuron methyl
  LC50 / 4 h rat : > 5,3 mg/l

Acute dermal toxicity

- Thifensulfuron methyl
  LD50 / rabbit : > 2 000 mg/kg

- Metsulfuron methyl
  LD50 / rabbit : > 2 000 mg/kg

Skin irritation

- Thifensulfuron methyl
  rabbit
  Result: No skin irritation

- Metsulfuron methyl
  rabbit
  Result: No skin irritation

Eye irritation

- Thifensulfuron methyl
  rabbit
  Result: No eye irritation

- Metsulfuron methyl
  rabbit
  Result: No eye irritation

Sensitisation

- Thifensulfuron methyl
  guinea pig Maximisation Test
  Result: Does not cause skin sensitisation.

- Metsulfuron methyl
  guinea pig
  Result: Animal test did not cause sensitization by skin contact.

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

- Metsulfuron methyl
  Oral rat
  Reduced body weight gain, Organ weight changes, Liver

  Dermal rabbit
  Skin irritation

Mutagenicity assessment

- Thifensulfuron methyl
  Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

- Metsulfuron methyl
  Did not show mutagenic effects in animal experiments. 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
  Did not show carcinogenic effects in animal experiments.

Toxicity to reproduction assessment

- Thifensulfuron methyl
  No toxicity to reproduction

- Metsulfuron methyl
  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

No data is available on the product itself.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish

- Thifensulfuron methyl
  LC50 / 96 h / Oncorhynchus mykiss (rainbow trout): > 100 mg/l

- Metsulfuron methyl
  LC50 / 96 h / Oncorhynchus mykiss (rainbow trout): > 150 mg/l

  LC50 / 96 h / Lepomis macrochirus (Bluegill sunfish): > 150 mg/l

Toxicity to aquatic plants

- Thifensulfuron methyl
  EC50 / 14 d / Lemna minor (duckweed): 0,0013 mg/l

- Metsulfuron methyl
  ErC50 / 72 h / Pseudokirchneriella subcapitata (green algae): 0,857 mg/l

Toxicity to aquatic invertebrates

- Thifensulfuron methyl
  EC50 / 48 h / Daphnia magna (Water flea): 470 mg/l

- Metsulfuron methyl
  EC50 / 48 h / Daphnia magna (Water flea): > 120 mg/l

Chronic toxicity to fish

- Thifensulfuron methyl
  NOEC / 21 d / Oncorhynchus mykiss (rainbow trout): > 250 mg/l

- 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

- 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.

- Thifensulfuron methyl
  According to the results of tests of biodegradability this product is not readily biodegradable.
- Metsulfuron methyl
  According to the results of tests of biodegradability this product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulation

No data is available on the product itself. Estimation based on data obtained on active ingredient.
Bioaccumulation is unlikely.

- Thifensulfuron methyl
  Does not bioaccumulate.
- Metsulfuron methyl
  Species: Lepomis macrochirus (Bluegill sunfish) / Exposure time: 28 d
  Bioconcentration factor (BCF): 2,0
  Method: OECD Test Guideline 305
  Does not bioaccumulate.

12.4. Mobility in soil

Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment
This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). / This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

Additional ecological information

No data is available on the product itself. 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

Product	:	In accordance with local and national regulations. Must be incinerated in a 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.
European Waste Catalogue number	:	020108: agrochemical waste containing dangerous substances

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:	III
14.5. Environmental hazards:	Environmentally hazardous
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:	III
14.5. Environmental hazards :	Environmentally hazardous
14.6. Special precautions for user:	

FMC internal recommendations and transport guidance: ICAO / IATA cargo aircraft only

IMDG

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:	III
14.5. Environmental hazards :	Marine pollutant
14.6. Special precautions for user:	

no data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Other regulations : The mixture is classified as dangerous in accordance with Directive 1999/45/EC.Take note of Dir 94/33/EC on the protection of young people at work.Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.Take note of Directive 96/82/EC on the control of major-accident hazards involving dangerous substances.Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values.

15.2. Chemical Safety Assessment

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

SECTION 16: Other information

Text of R-phrases mentioned in Section 3

R36/38	Irritating to eyes and skin.
R50/53	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.

H315	Causes skin irritation.
H319	Causes serious eye irritation.
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
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
IATA_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 observable 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
vPvB	very Persistent and very Bioaccumulative

Further information

Take notice of the directions of use on the label.

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.