



SELECT PRIM

Version 2 / EU
102000016449

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Revision Date: 22.04.2013
Print Date: 28.04.2013

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name SELECT PRIM
Product code (UVP) 06111385

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

Use Herbicide

1.3 Details of the supplier of the safety data sheet

Supplier Bayer CropScience AG
Alfred-Nobel-Straße 50
40789 Monheim am Rhein
GermanyTelefax +49(0)2173-38-7394
Responsible Department Product Safety and Specification Management
+49(0)2173-38-3409/3189 (during business hours only)
Email: BCS-SDS@bayer.com

1.4 Emergency telephone no.

Emergency telephone no. Global Incident Response Hotline (24h)
+1 (760) 476-3964 (Company 3E for Bayer CropScience)

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 Irritant, R38
Xn Harmful, R65
R67
N Dangerous for the environment, R51/53

2.2 Label elements

||| Labelling in accordance with the EU Directive on dangerous preparations 1999/45/EC, as amended.**||| Hazard label for supply/use required.**

Hazardous components which must be listed on the label:

- Clethodim
- Solvent Naphtha (petroleum), heavy aromatic

Symbol(s)



Xn Harmful



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N Dangerous for the environment

R-phrases

R38	Irritating to skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R67	Vapours may cause drowsiness and dizziness.

To avoid risks to man and the environment, comply with the instructions for use.
Contains Clethodim. May produce an allergic reaction.

S-phrases

S23	Do not breathe spray.
S35	This material and its container must be disposed of in a safe way.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S51	Use only in well-ventilated areas.
S61	Avoid release to the environment. Refer to special instructions/ Safety data sheets.
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

2.3 Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature

Emulsifiable concentrate (EC)
Clethodim 120 g/l EC

Hazardous components

R-phrases according to EC directive 67/548/EEC
Hazard statements according to Regulation (EC) No. 1907/2006

Name	CAS-No. / EC-No.	Classification		Concentration [%]
		EC Directive 67/548/EEC	Regulation (EC) No 1272/2008	
Clethodim	99129-21-2	Xn; R22 Xi; R38 R43 R52/53	Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412	12,98
Methyl esters of fatty acids	67784-80-9 267-055-2	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	> 40,00 - < 60,00

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Solvent Naphtha (petroleum), heavy aromatic	64742-94-5 265-198-5	Xn; R65 R66 R67 N; R51/53	Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411	> 20,00 - < 40,00
Amines, tallow alkyl, ethoxylated, compds. with polyethylene glycol hydrogen sulfate C12-14-alkyl ether	184785-40-8	Xn; R22 Xi; R38 Xi; R41 N; R51/53	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411	> 4,00 - < 10,00
1,2,4-Trimethylbenzene	95-63-6 202-436-9	R10 Xn; R20 Xi; R36/37/38 N; R51/53	Flam. Liq. 3, H226 Acute Tox. 4, H332 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Aquatic Chronic 2, H411	< 4,00
Mesitylene	108-67-8 203-604-4	R10 Xi; R37 N; R51/53	Flam. Liq. 3, H226 STOT SE 3, H335 Aquatic Chronic 2, H411	< 4,00
Naphthalene	91-20-3 202-049-5	Carc.Cat.3 R40 Xn; R22 N; R50/53	Carc. 2, H351 Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	< 0,10

Further information

Substances which do not meet the classification criteria according to Directive 67/548/EEC as amended:

Naphthalene (91-20-3): Substance with an EU indicative Occupational Exposure Limit value (OEL) below the threshold value for reporting.

For the full text of the R-phrases/ Hazard statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures****Inhalation**

Move the victim to fresh air and keep at rest.

Skin contact

Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.

Eye contact

Remove contact lens and rinse eyes immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.



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Ingestion

Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Diarrhoea, Breathing difficulties, Ataxia

4.3 Indication of any immediate medical attention and special treatment needed

Treatment

Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate. Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire the following may be released:

Carbon monoxide (CO)

Nitrogen oxides (NO_x)

Sulphur oxides

5.3 Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat.

Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

Remove all sources of ignition.

6.2 Environmental precautions

Do not allow to get into surface water, drains and ground water.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

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Information regarding safe handling, see section 7.
 Information regarding personal protective equipment, see section 8.
 Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling****Advice on safe handling**

Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

Hygiene measures

Smoking, eating and drinking should be prohibited in the application area.
 Wash hands before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities**Requirements for storage areas and containers**

Store in original container.
 Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

7.3 Specific end uses

Refer to the label and/or leaflet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters**

Components	CAS-No.	Control parameters	Update	Basis
1,2,4-Trimethylbenzene	95-63-6	100 mg/m ³ / 20 ppm (TWA)	12 2009	EU ELV
Mesitylene	108-67-8	100 mg/m ³ / 20 ppm (TWA)	12 2009	EU ELV
Naphthalene	91-20-3	10 ppm (TWA)		OES BCS*
Naphthalene	91-20-3	50 mg/m ³ / 10 ppm (TWA)	12 2009	EU ELV

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

8.2 Exposure controls**Personal protective equipment**

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

Wear respirator with an organic vapours and gas filter mask
 (protection factor 10) conforming to EN140 type A or equivalent.
 Respiratory protection should only be used to control residual risk of

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short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Hand protection

Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.

Eye protection

Wear goggles conforming to EN166 (Field of Use 5 or equivalent).

Skin and body protection

Wear standard coverall and type 6 suit.
Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.
If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.

Protective measures

Do not inhale aerosols.

Avoid contact with skin and eyes.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Form	liquid, clear
Colour	beige to brown
Odour	aromatic
pH	3 - 5 at 100 % (20 °C) 4,4 at 1 % (20 °C) (as aqueous solution)
Flash point	74,9 °C
Density	ca. 0,92 g/cm ³ at 20 °C
Solubility/qualitative	miscible with most organic solvents
Water solubility	miscible

9.2 Other information

Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY



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10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions when stored and handled according to prescribed instructions.

10.4 Conditions to avoid

Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Store only in the original container.

10.6 Hazardous decomposition products

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity LD50 (rat) > 5.000 mg/kg

Acute inhalation toxicity LC50 (rat) > 5,51 mg/l
Exposure time: 4 h

Acute dermal toxicity LD50 (rat) > 2.000 mg/kg

Skin irritation Irritating to skin. (rabbit)

Eye irritation No eye irritation (rabbit)

Sensitisation Non-sensitizing. (guinea pig)
OECD Test Guideline 406, Magnusson & Kligman test

Assessment repeated dose toxicity
Clethodim caused liver effects and anemia in chronic studies in rodents and dogs.

Assessment neurotoxicity
Clethodim did not demonstrate the potential to cause neurotoxicity in standard toxicity studies using laboratory animals.

Assessment Mutagenicity
Clethodim was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity
Clethodim was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment Toxicity to Reproduction
Clethodim did not cause reproductive toxicity in a two-generation study in rats.



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SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) = 8,98 mg/l Exposure time: 96 h
Chronic Toxicity to Fish	<i>Oncorhynchus mykiss</i> (rainbow trout) NOEC: 3,9 mg/l Exposure time: 21 d The value mentioned relates to the active ingredient clethodim.
Toxicity to aquatic invertebrates	EC50 (Water flea (<i>Daphnia magna</i>)) = 29,4 mg/l Exposure time: 48 h
Chronic Toxicity to Aquatic Invertebrates	<i>Daphnia</i> NOEC: 49 mg/l Exposure time: 21 d The value mentioned relates to the active ingredient clethodim.
Toxicity to aquatic plants	EC50 (<i>Pseudokirchneriella subcapitata</i>) = 5,73 mg/l Growth rate; Exposure time: 72 h

12.2 Persistence and degradability

Biodegradability Not applicable for this mixture.

12.3 Bioaccumulative potential

Bioaccumulation Bioconcentration factor (BCF): 2,1
The value mentioned relates to the active ingredient clethodim.

12.4 Mobility in soil

Mobility in soil Not applicable for this mixture.

12.5 Results of PBT and vPvB assessment

Not relevant as no chemical safety report is necessary.

12.6 Other adverse effects

Additional ecological information
No other effects to be mentioned.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

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In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

Contaminated packaging

Not completely emptied packagings should be disposed of as hazardous waste.

Waste key for the unused product

020108 agrochemical waste containing dangerous substances

SECTION 14: TRANSPORT INFORMATION**ADR/RID/ADN**

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CLETHODIM, SOLVENT NAPHTHA (PETROLEUM) HEAVY AROMATIC SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	90
Tunnel Code	E

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

IMDG

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CLETHODIM, SOLVENT NAPHTHA (PETROLEUM) HEAVY AROMATIC SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Marine pollutant	YES

IATA

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CLETHODIM, SOLVENT NAPHTHA (PETROLEUM) HEAVY AROMATIC SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES

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 transport in bulk according to the IBC Code.



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SECTION 15: REGULATORY INFORMATION

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

Further information

WHO-classification: III (Slightly hazardous)

15.2 Chemical Safety Assessment

A chemical safety assessment is not required.

SECTION 16: OTHER INFORMATION

Text of R-phrases mentioned in Section 3

R10	Flammable.
R20	Harmful by inhalation.
R22	Harmful if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
R36/38	Irritating to eyes and skin.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R40	Limited evidence of a carcinogenic effect.
R41	Risk of serious damage to eyes.
R43	May cause sensitization by skin contact.
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.
R52/53	Harmful 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.

Text of the hazard statements mentioned in Section 3

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.



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H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
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.
H412	Harmful to aquatic life with long lasting effects.

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 453/2010 amending Regulation (EU) No 1907/2006 (and any subsequent amendments). This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

Note Bayer CropScience:

This data sheet has been generated according to the safety data sheet supplied by the manufacturer of the product:

ARYSTA PARIS s.a.s

Reason for Revision: Safety Data Sheet according to Regulation (EU) No. 453/2010.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.