

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

1.1. Product identifier

Product form : Mixture
Product name : CENTIUM 360 CS
Product code : 6270

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Herbicide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

FMC CHEMICAL Sprl
Boulevard de la Plaine, 9/3
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T 00 32 2 6459584 - F 00 32 2 6459655
msdsinfo@fmc.com

1.4. Emergency telephone number

Emergency number : 00 32 14 58 45 45 (all countries)

Country	Organisation/Company	Address	Emergency number
BELGIUM	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Central de la Base - Reine Astrid	Rue Bruyn B -1120 Brussels	+32 70 245 245
BULGARIA	National Toxicological Information Centre National Clinical Toxicology Centre, Emergency Medical Institute "Pirogov"	21 Totleben Boulevard 1606 SOFIA	+359 2 9154 409
ČESKÁ REPUBLIKA	Toxikologické informační středisko	Na Bojišti 1 120 00 Praha 2	+420 224 919 293 +420 224 915 402
DANMARK	Giftlinjen Bispebjerg Hospital	Bispebjerg Bakke 23, 60, 1 DK-2400 Copenhagen NV	+45 82 12 12 12
FRANCE	ORFILA	http://www.centres-antipoison.net	+33 (0)1 45 42 59 59
GERMANY	Berliner Betrieb für Zentrale Gesundheitliche Aufgaben Institut für Toxikologie, Klinische Toxikologie und Giftnotruf Berlin	Oranienburger Strasse 285 13437 Berlin	+49 30 19240
HUNGARY	Országos Kémiai Biztonsági Intézet (National Institute of Chemical Safety) Egészségügyi Toxikológiai Tájékoztató Szolgálat (Health Toxicological Information Service)	1437 Budapest PO Box 839 1097 Budapest, Nagyvárad tér 2	+36 80 20 11 99
IRELAND (REPUBLIC OF)	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2166
ITALY	Centro Antiveneni Ospedale Niguarda Ca' Granda	Piazza Ospedale Maggiore 3 20162 Milano	+39 02 6610 1029
LITHUANIA	Poisons Control and Information Bureau	Siltnamiu 29 2043 Vilnius	+370 523 62052 +370 687 53378
NEDERLAND	Nationaal Vergiftigingen Informatie Centrum (Uitsluitend bestemd omartsen te informeren bij accidente vergiftigingen)	Heidelberglaan 100 3584 CX Utrecht	+31 30 274 88 88
NORWAY	Giftinformasjonen Directorate of Health and Social Affairs	P.O. Box 7000 St. Olavs Plass 130 Oslo	+47 22 591300
POLAND	Warsaw Poison Control and Information Centre Praski Hospital	Al. Solidarnosci 67 P-03 401 Warszawa	+48 22 619 66 54 +48 22 619 08 97
PORTUGAL	Centro de Informação Antivenenos – Dra Arlinda Borges Instituto Nacional de Emergência Médica (INEM)	Rua Almirante Barroso, 36 1000-013 Lisboa	808 250 143 (for use only in Portugal), +351 21 330 3284
ROMANIA	Institutul National de Sanatate Publica	Str. Dr. Leonte Anastasievici Nr.1-3, Sector 5 Bucuresti, directie.generala {at} insp.gov.ro 050463 Bucuresti	+40 21318 3606
SLOVAKIA	National Toxicological Information Centre University Hospital Bratislava	Limbová 5 833 05 Bratislava	+421 2 54 77 4 166
SLOVENIA	Poison Centre Division of Internal Medicine	University Clinical Centre Zaloska 7 1525 Ljubljana	+ 386 41 650 500

CENTIUM 360 CS

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Country	Organisation/Company	Address	Emergency number
SPAIN	Servicio de Información Toxicológica Instituto Nacional de Toxicología, Departamento de Madrid	Calle Luis Cabrera 9 E-28002 Madrid	+34 91 562 04 20
SUOMI	Myrkytystietokeskus	P.O.B 790 (Tukholmankatu 17) HUS SF - 00029 Helsinki	+358 9 471 977
SWEDEN	Giftinformationscentralen Swedish Poisons Information Centre, Karolinska Hospital	Box 60 500 SE-171 76 Stockholm	08-331231 (Måndag-Fredag; 9.00-17.00) 112 (0.00-24.00)
UNITED KINGDOM	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0870 600 6266 (UK only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aquatic Chronic 4 H413

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

R53

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

May cause long lasting harmful effects to aquatic life.

2.2. Label elements

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

Signal word (CLP)	: -
Hazard statements (CLP)	: H413 - May cause long lasting harmful effects to aquatic life
Precautionary statements (CLP)	: P273 - Avoid release to the environment P501 - Dispose of this material and its container to hazardous or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
EUH phrases	: EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Clomazone	(CAS No) 81777-89-1	< 35	Xn; R20/22 N; R50/53	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Sodium nitrate	(CAS No) 7631-99-4 (EC no) 231-554-3	5	O; R8 Xn; R22 Xi; R36/37/38	Ox. Sol. 1, H271 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
calcium chloride	(CAS No) 10043-52-4 (EC no) 233-140-8 (EC index no) 017-013-00-2	5	Xi; R36	Eye Irrit. 2, H319

Full text of R- and H-phrases: see section 16

CENTIUM 360 CS

Safety Data Sheet

according to Regulation (EC) No. 453/2010

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Move the affected person to the fresh air
In the event of coughing and slight breathlessness:
Call a doctor.
- First-aid measures after skin contact : Remove all contaminated clothing and footwear
Wash with soapy water.
- First-aid measures after eye contact : Rinse immediately with plenty of water
Consult an ophthalmologist if irritation persists.
- First-aid measures after ingestion : Rinse mouth out with water
If the person is fully conscious, make him/her drink plenty of water. Never give an unconscious person anything to drink
Ask for medical advice.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Clomazone :
Symtoms observed in laboratory animals :
Nosebleed
Lacrimation
Loss of coordination.

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

Treat symptomatically and supportively in response to reactions of patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Powder
Foam
Carbon dioxide (CO₂)
Water.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : During combustion :
Toxic vapours may be released.

5.3. Advice for firefighters

- Firefighting instructions : Isolate fire area. Evacuate downwind
Do not breathe fumes
Contain the extinguishing fluids by bunding
Do not allow run-off from fire-fighting to enter drains or water courses.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment
Self-contained breathing apparatus
Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Avoid contact with skin and eyes
Do not breathe vapours.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment
For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Do not allow product to spread into the environment
Contain the spilled material by bunding
(May be dangerous for the environment).

6.3. Methods and material for containment and cleaning up

- For containment : Liquid spill: take up in sand, earth, vermiculite.
- Methods for cleaning up : Clean and neutralize spill area, tools and equipment by washing with bleach, soap and water
Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in section 13.

6.4. Reference to other sections

For further information refer to section 13.

CENTIUM 360 CS

Safety Data Sheet

according to Regulation (EC) No. 453/2010

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Vapour extraction Avoid any direct contact with the product Work in a well-ventilated area.
Hygiene measures	: Always wash hands after handling the product Always take a shower after work Separate working clothes from town clothes. Launder separately Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in dry, cool, well-ventilated area Protect from freezing Keep out of the reach of children Keep away from food, drink and animal feeding stuffs.
Packaging materials	: Original packaging.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station Extraction to remove vapours at their source.
Hand protection	: Neoprene protective gloves Nitrile-rubber protective gloves.
Eye protection	: Safety glasses.
Skin and body protection	: Impermeable clothing.
Respiratory protection	: If the ventilation is suitable, it is not essential to wear respiratory equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: light beige.
Odour	: Slight aromatic.
Odour threshold	: No data available
pH	: 8,87
pH solution	: 1 %
Relative evaporation rate (butyl acetate=1)	: Not determined
Melting point	: Not determined
Boiling point	: Not determined
Flash point	: > 79 °C
Auto-ignition temperature	: 392 °C
Decomposition temperature	: Not determined
Flammability (solid, gas)	: No data available
Vapour pressure	: Not determined
Relative vapour density at 20 °C	: Not determined
Relative density	: 1,1712 (20°C)
Solubility	: Water: Dispersible
Log Pow	: Not determined
Viscosity, kinematic	: Not determined
Viscosity, dynamic	: 115 - 746 mPa.s (20°C)
Explosive properties	: Not explosive.
Oxidising properties	: Non oxidizing material.
Explosive limits	: No data available

9.2. Other information

Other properties	: Surface tension : 46.7 mN/m (25 °C) - 44.2 mN/m (40 °C).
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CENTIUM 360 CS

Safety Data Sheet

according to Regulation (EC) No. 453/2010

SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

None to our knowledge.

10.4. Conditions to avoid

None, to our knowledge.

10.5. Incompatible materials

None to our knowledge.

10.6. Hazardous decomposition products

On thermal decomposition (pyrolysis), releases : Nitrogen oxides, Hydrochloric acid, Chlorine
Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)

CENTIUM 360 CS	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat	> 5,21 mg/l/4h (maximum attainable concentration - zero mortality)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Clomazone :
No mutagenic effects were noted

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Clomazone :
No carcinogenic effect was noted

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

Clomazone :
Fertility and development toxicity tests did not reveal any effect on reproduction

Specific target organ toxicity (single exposure) : Not classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity (repeated exposure) : Not classified (Based on available data, the classification criteria are not met)

Clomazone (81777-89-1)	
NOAEL, rat	1000 mg/kg bw/day (28 days)
NOAEL, rat	41 mg/kg bw/day (2 years)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects to the aquatic environment.

CENTIUM 360 CS	
LC50 fish	592,7 mg/l/96h
EC50 Daphnia	491,3 mg/l/48h
ErC50 (algae)	160,85 mg/l/96h
NOEC algae	93,9 mg/l/72h

CENTIUM 360 CS

Safety Data Sheet

according to Regulation (EC) No. 453/2010

12.2. Persistence and degradability

Clomazone (81777-89-1)

Persistence and degradability	Half-life (whole system) : 40.4 - 66.9 days Half-life (in soil) : 15 – 90 days.
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12.3. Bioaccumulative potential

Clomazone (81777-89-1)

BCF	40
Log Pow	2,54 (23 °C)

12.4. Mobility in soil

Clomazone (81777-89-1)

Mobility in soil	Medium mobility in soil
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12.5. Results of PBT and vPvB assessment

Component

Clomazone (81777-89-1)	The product does not meet the PBT and vPvB classification criteria
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12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of in accordance with relevant local regulations Incinerate at a licensed installation.
Additional information	: Clean container with water Recycle or dispose of in compliance with current legislation Do not re-use empty containers.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : No additional information 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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no substance on the REACH candidate list

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

A chemical safety assessment acc. to art. 14 of Regulation (EC) No 1907/2006 is not required, because art. 15 of the same regulation applies

CENTIUM 360 CS

Safety Data Sheet

according to Regulation (EC) No. 453/2010

SECTION 16: Other information

Indication of changes:

This sheet was updated (refer to the date at the top of this page)

SDS changed section(s) : 5-6-12-14.

Other information : Centium and FMC are registered trademarks of FMC Corporation.

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Sol. 1	Oxidising Solids, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H271	May cause fire or explosion; strong oxidiser
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life
R20/22	Harmful by inhalation and if swallowed
R22	Harmful if swallowed
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system and skin
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R53	May cause long-term adverse effects in the aquatic environment
R8	Contact with combustible material may cause fire
N	Dangerous for the environment
O	Oxidising
Xi	Irritant
Xn	Harmful

FDS FMC UE (Annexe II REACH)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product