

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

- 1.1. Product identifier** : AURORA 40 WG/PLATFORM 40 WG
1.2. Relevant identified uses of the substance or mixture and uses advised against : Herbicide
1.3. Details of the supplier of the safety data sheet
Name : FMC CHEMICAL Sprl
Address : Boulevard de la Plaine, 9/3
 1050 BRUXELLES
 BELGIQUE
Telephone number : 00 32 2 6459584
Telefax number : 00 32 2 6459655
E-mail : msdsinfo@fmc.com
1.4. Emergency telephone number : 00 32 14 58 45 45

SECTION 2 HAZARDS IDENTIFICATION
2.1. Classification of the substance or mixture
MOST IMPORTANT HAZARDS

Adverse human health effects : May cause sensitization by skin contact

Environmental effects : Very toxic to aquatic organisms.
 May cause long-term adverse effects in the aquatic environment.

Physical and chemical hazards

- Fire or explosion : Not classified as flammable by EC criteria

Classification of the product : According to European regulations (67/548/EEC & 1999/45/EC), this product is classified as :
 R43
 N; R50-53

2.2. Label elements

Identification of the hazardous product : : Active ingredient(s) :
 Carfentrazone-ethyl

- Symbols and indications of danger



- R phrases** : - IRRITANT (Xi) - DANGEROUS FOR THE ENVIRONMENT (N)
 : R43 : May cause sensitization by skin contact.
 R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- S phrases** : S2 : Keep out of the reach of children.
 S46 : If swallowed seek medical advice immediately and show this container or label.
 S24 : Avoid contact with skin.
 S37 : Wear suitable gloves.
 S57 : Use appropriate container to avoid environmental contamination.
- Additional phrases** : The following must appear on the label :
 To avoid risks to man and the environment, comply with the instructions for use Sensitizing product. Sensitizing components have not been identified.



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SECTION 2 HAZARDS IDENTIFICATION (continued)

2.3. Other hazards : None, to our knowledge

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

MIXTURE

Chemical nature : Herbicide based on carfentrazone-ethyl

Hazardous constituents

Substance name	Contents	CAS No	EC No	Index No	Classification
Carfentrazone-ethyl (ISO)	< 50 %	128639-02-1	----	607-309-00-5	N; R50-53 Aquatic Acute 1 H400 Aquatic Chronic 1 H410

Further information : Full text of R and H phrases : see section 16

SECTION 4 FIRST AID MEASURES

4.1. Description of first aid measures

- Inhalation** : Move the affected person to the fresh air
If the person feels unwell :
Call a doctor
- Skin contact** : Remove all contaminated clothing and footwear
Wash with soap and water
In case of redness or irritation, call a doctor
- Eye contact** : Rinse immediately with plenty of water (for at least 15 minutes).
If irritation persists, consult an eye specialist
- Ingestion** : If the person is fully conscious, make him/her drink water. Never give an unconscious person anything to drink
Consult a doctor if necessary
- 4.2. Most important symptoms and effects, both acute and delayed** : No information available
- 4.3. Indication of any immediate medical attention and special treatment needed** : Treat symptomatically and supportively in response to reactions of patient

SECTION 5 FIRE-FIGHTING MEASURES

5.1. Extinguishing media

- Suitable extinguishing media** : Carbon dioxide (CO2)
Foam
Powders
- Not suitable extinguishing media** : Water (the product is dangerous for the environment - do not dilute it)
- 5.2. Special hazards arising from the substance or mixture** : During combustion :
Toxic vapors may be released
- 5.3. Advice for fire-fighters** : Isolate fire area. Evacuate downwind
Contain the extinguishing fluids by bunding (the product is hazardous for the environment)
Do not breathe fumes.
Do not attempt to fight the fire without suitable protective equipment :
Self-contained breathing apparatus
Complete protective clothing



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SECTION 6 ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures** : For non-emergency personnel :
Avoid contact with skin and eyes
For emergency responders :
Do not attempt to fight the fire without suitable protective equipment
For further information see section 8
- 6.2 Environmental precautions** : Do not allow product to spread into the environment
Contain the spilled material by bunding (product is hazardous for the environment)
- 6.3. Methods and material for containment and cleaning up**
- **Recovery** : Avoid creating or spreading dust
Spray with water.
Recover the product with absorbent material
 - **Neutralization :** : Absorb spillage with:
 - earth or sandNeutralize non-recoverable product with :
 - a solution of caustic or soda ash, and an appropriate alcohol (methanol, ethanol or isopropanol)
 - **Cleaning/decontamination** : Wash with plenty of water and detergent
 - **Disposal** : Dispose of contaminated material at an authorized site.
- 6.4 Reference to other sections** : For further information see section 13

SECTION 7 HANDLING AND STORAGE

- 7.1. Precautions for safe handling**
- Technical measures** : Dust extraction (suction)
- Hygiene measures** : Always wash your hands after handling the product
Do not eat, drink or smoke during use
Always take a shower after work.
- 7.2. Conditions for safe storage, including any incompatibilities**
- Storage conditions**
- **Recommended** : Store :
 - the container tightly closed and dry
 - in a cool, well-ventilated area
 - away from any source of ignition
 - out of reach of children
 - away from food and drinks and animal foodstuffs
- Packaging materials**
- **Recommended** : Original packaging
- 7.3. Specific end use(s)** : No information available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1. Control parameters**
- Occupational exposure limits** : No specific limit
- 8.2. Exposure controls**
- Engineering measures** : Ensure good ventilation of the work station
Extraction to remove dust at its source
- Personal protective equipment**
- **Respiratory protection** : In the event of insufficient ventilation :
Filtering respiratory protective device with a pesticide canister



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SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

- Hand protection : Nitrile-rubber protective gloves
Neoprene rubber gloves
- Eye protection : If the dust is spread :
Safety spectacles with side shields
- Skin and body protection : Handling product in large quantities :
Impermeable suit (Hypalon, Tyvek, Saranex, PVC...).
Safety foot-wear

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

- Physical state : Solid
 - Colour : white beige
 - Odour : faint chemical
 - Odour threshold : Not applicable
 - pH : 7.5 at 22 °C (Aqueous solution - 5.44 %)
 - Specific temperatures
 - Boiling : Not applicable
 - Melting point : Not applicable
 - Decomposition temperature : Not applicable
 - Flammability characteristics
 - Flash point : Not applicable
 - Auto-ignition temperature : No self-ignition temperature
 - Oxidizing properties : Non oxidizing material according to EC criteria
 - Explosion properties : Not explosive
 - Vapour pressure : Not applicable
 - Vapour density (air = 1) : Not applicable
 - Bulk density : 0.55 g/ml
 - Solubility : Not applicable
 - Octanol/water partition coefficient : Not applicable
 - Kinematic viscosity : Not applicable
 - Evaporation rate : Not applicable
- 9.2 Other information : No information available

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 : May decompose :
- on heating
- 10.5. Incompatible materials : None, to our knowledge
- 10.6. Hazardous decomposition products : On combustion or on thermal decomposition (pyrolysis) releases :
Carbon oxides (CO, CO₂)
Nitrogen oxides
Hydrogen fluoride
Hydrochloric acid



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SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity	: LC 50 inhalation / 4h (rat) : > 5.72 mg/l LD 50 skin (Rat) : > 5000 mg/kg LD 50 oral (rat) : > 5000 mg/kg
Skin corrosion/irritation	: Not irritating
Serious eye damage/irritation	: Not irritating
Respiratory or skin sensitization	: May cause sensitization on contact with skin
Repeated dose toxicity	: No additional information available
Carcinogenicity	: Carfentrazone-ethyl : No cancerogenic effects were noted
Mutagenicity	: Carfentrazone-ethyl : No mutagenic effects were noted
Reproductive toxicity	: Carfentrazone-ethyl : Fertility and development toxicity tests did not reveal any effect on reproduction

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity	: Product as is : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment EC 50 (Algae)/72h : 67 µg/l Carfentrazone-ethyl : EC 50 (Algae) : 12 µg/l LC 50 (Fish) : 1.6 mg/l EC 50 (Daphnia) / 48h : > 9.8 mg/l
12.2. Persistence and degradability	: Carfentrazone-ethyl : Half-life (in water) : 8.3 d (pH = 5) Half-life (in soil) : <1.5 d
12.3. Bioaccumulative potential	: Carfentrazone-ethyl : log Pow = 3.36 BCF : 159
12.4. Mobility in soil	: Carfentrazone-ethyl : High mobility
12.5. Results of PBT and vPvB assessment	: Carfentrazone-ethyl : Moderately persistent
12.6. Other adverse effects	: No information available

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

WASTE FROM PRODUCT

Prohibition :	: Discharging waste into rivers and drains is prohibited
Destruction/Disposal	: Dispose of in accordance with relevant local regulations Incinerate at a licensed installation

CONTAMINATED PACKAGING

Destruction/disposal	: Dispose of in accordance with relevant local regulations Do not re-use empty container
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SECTION 14 TRANSPORT INFORMATION

14.1. UN number	: 3077
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SECTION 14 TRANSPORT INFORMATION (continued)

- 14.2. UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Carfentrazone-ethyl (ISO))
- 14.3. Transport hazard class(es) : 9
- 14.4. Packing group : III
- 14.5. Environmental hazards : Additional marking : "Environmentally hazardous substance"
Marine pollutant : YES
- 14.6. Special precautions for user : No information available
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code : No information available

SECTION 15 REGULATORY INFORMATION

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

SECTION 16 OTHER INFORMATION

- R phrases text of § 2&3 : R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- H phrases text of § 2&3 : H400 : Very toxic to aquatic life
H410 : Very toxic to aquatic life with long lasting effects
- * Update : : This sheet was updated (refer to the date at the top of this page)
This sheet has been revised completely (changes were not marked)
- Registered trademarks : : Aurora, Platform and FMC are registered trademarks of FMC Corporation

This sheet complements the technical sheets but does not replace them. The information given is based on our knowledge of the product, at the time of publication. It is given in good faith.

Besides, the attention of the user is drawn to the possible risk incurred by using the product for any other use than that for which it was intended.

In no way does this exempt the user from knowing and applying all the regulations controlling his activity. The user alone will take on the responsibility for taking the precautions involved by the use of the product.

The aim of all the mandatory regulations mentioned is just to help the user to fulfill his obligations regarding the use of hazardous products.

This information must not be considered exhaustive. It does not exempt the user from ensuring that other obligations than those mentioned could apply, related to the storage and use of the product, this being his sole responsibility.

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