

Material Safety Data Sheet

Date/ prepared : December 2007
Date /revised : November 06, 2012
Internal ref. MA120020a

1.0 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

1.1 Product identifier

Product form : Liquid mixture
Trade name : **GEO-X**
Product code : OREU 030
Function of the mixture : Pesticide
REACH registration number : Not applicable
CAS No. : Not applicable

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

Pesticide to control pests and plant diseases - Plant Protection Product used in agriculture.
To be used according to the label recommendations - Mixture only used in dilutions.

1.3 Details of the supplier of the safety data sheet

VIVAGRO
Espace France
4 Voie Romaine Batiment C
33610 CANEJANS - FRANCE

Phone number: 33 (0)5 57 78 32 68
Fax number: 33 (0)5 57 29 38 35
Email address: vivagro@orange.fr

1.3 Emergency telephone number

Phone number:
Fax number:

2.0 HAZARDS IDENTIFICATION

This mixture is regulated according to the Directive 1999/45/EEC, with adaptation and appendixes.

2.1 Classification of substance or mixture

Class C

Human health effects :

Primary route(s) of exposure : Eye, skin and inhalation.

Effects from over exposure :

The liquid may cause eye irritation.

The liquid may cause moderate skin irritation / sensitization.

Slight inhalation hazard may happen under acute local application.

Environmental effects :

The liquid is harmful to the aquatic organisms (acute exposure).

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2.2 Label elements

Labeling according to the Directive 1999/45/EEC :

Symbol(s) :

Class C

Risk phrase(s) :

Harmful by inhalation.

Irritating to eyes.

May cause sensitization by skin contact.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrase(s) :

Keep out of reach of children.

Keep away from food, drink and animal feed.

Avoid contact with skin and eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable gloves.

Avoid release to the environment. Refer to special instruction/ Safety Data Sheet.

2.3 Other hazards

None.

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Not applicable.

3.2 Mixtures

- Chemical characteristics :

SL : Soluble concentrate.

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Additional information

For full text of H-statements and R-phrases: see section 16

4.0 FIRST AID MEASURES

4.1 Description of first aid measures

General

measures: Remove affected person from work zone. Move to well-ventilated area and protect against hypothermia. Do not administer anything orally and do not induce vomiting. Seek medical attention or contact poisoning centre.

Inhalation: In case of inhalation move the victim to fresh air. Seek medical advice if symptoms develop.

Eye contact: In case of contact with eyes, separate eyelids with fingers and rinse immediately with plenty of water for 15-20 minutes: do not forget to remove contact lens. Seek medical advice if symptoms develop

Skin contact: Remove contaminated clothing. Wash immediately with plenty of water for 15-20 minutes. Seek medical advice if needed.

Ingestion: If swallowed, wash mouth with water provided the victim is conscious. Seek medical advice if symptoms develop. Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation – Slight irritation.

Eye and skin contact – Eye irritation. Possible skin sensitization.

Ingestion – None.

4.3 Indication of any immediate medical attention and special treatment needed

No specific antidote. Provide supportive care and symptomatic treatment.

5.0 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use dry chemical foam or carbon dioxide. Use water to cool containers exposed to fire.
No unsuitable extinguishing media known

5.2 Special hazards arising from the substance or mixture

During a fire, irritating and possibly toxic gasses may be generated by thermal decomposition or combustion (carbon and sulphur oxides (CO, CO₂, SO_x))
Use self-contained breathing apparatus and completely protective clothes.

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5.3 Advice for fire-fighters

Evacuate all persons from the fire site. Fight fire from a protected location. Use water spray to cool containers exposed to fire. Keep adequate measures to prevent environmental contamination. Dike fire control water for later disposal according to local laws. Depending on fire location it is preferable not to use water to prevent the risk of environmental contamination; if not possible use spray water consciously.

6.0 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid eye and skin contact. Use adequate protective clothes, gloves and protective mask with vapour filter. Isolate the spill area and limit the access to essential personnel. Eliminate any possible ignition source. Avoid contact or inhalation of product. Ventilate the confined space before entry.

6.2 Environmental precautions

Keep spills and cleaning runoff out of municipal sewers and open bodies of water. Prevent dispersion of spills. Block the leakage if this does not present a risk. If the product has contaminated bodies of water or soil or vegetation, alert the local authorities.

6.3 Methods and material for containment and cleaning up

Cover the entire spill with absorbing material, such as clay, soil or any commercially available absorbent, collect it, avoiding producing dust, and place it in an appropriate container for later disposal. Avoid the use of water for cleaning up.

6.4 Reference to other sections

None

7.0 HANDLING AND STORAGE

7.1 Precautions for safe handling

Use adequate protective equipment to avoid direct contact of the product. Handle product in well ventilated areas, if possible with emergency shower/eye wash. Do not smoke, drink or eat while handling the product. After handling wash thoroughly with soap and water. Remove contaminated clothing and wash after use. Keep personal protective equipment separate from other laundry; wash it separately. Do not handle damaged packages without adequate protective devices. Food personal hygiene is required. Keep the container tightly closed when not in use.

7.2 Consideration for safe storage, including any incompatibilities

Keep the product only in the original container, tightly closed and labelled. Store in a fresh, dry and well ventilated place, protect from sunlight, heat and humidity. Avoid temperatures below 0°C and above 35 °C. Do not store near flame and heat sources. Keep away from food, drink and animal feedstuffs. Keep children and the public away from the storage area.

7.3 Specific end uses

Specific end use is written on the label.

8.0 EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Exposure limit values:

Not relevant

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8.2 Exposure controls

General:

When using do not eat, drink or smoke. Do not breathe vapour/spray. Avoid contact with skin and eyes

Respiratory protection:

Because of the low volatility and toxicity of this product, respiratory protection is not typically necessary. If significant vapors are generated, use either a chemical cartridge respirator or supplied air.

Eye protection:

Safety glasses that assure complete shielding of eyes.

Skin protection:

Wear suitable impermeable gloves. Wear long-sleeved shirt, long pants, shoes, and socks.

Environmental:

Avoid spillage. Keep the product in proper storage conditions. Keep containers closed.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	/	Blue green liquid
Odour	/	Citrus-like
Odour threshold	/	Not determined.
pH	At 20°C	7.5
Melting point / freezing point	/	- 3°C
Initial boiling point and boiling range	/	Not applicable
Flash point	Pensky-Martens	> 93°C
Evaporation rate	/	Not determined.
Flammability	/	Not flammable.
Upper/lower flammability or explosive limits	/	Not explosive.
Vapour pressure	/	Not applicable
Vapour density	/	Not applicable
Relative density	g/cm ³	1.019 at 20°C
Solubility	/	Complete in water.
Partition coefficient: n-octanol/water	/	Not applicable
Auto ignition temperature	EEC A15	> 448°C
Decomposition temperature	/	Not determined
Viscosity	OECD 114	103.5 and 11.9 mPa/s at 20°C 75.9 and 80.9 mPa/s at 40°C
Explosive properties	/	Not explosive (H ₂ O > 60%)
Oxidizing properties	OPPTS 830.6314	Not oxidising.

9.2 Other information

None

10.0 STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable. No decomposition within 2 years if stored and handled properly (see Point 7).

10.3 Possibility of hazardous reactions

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No data available

10.4 Conditions to avoid

Avoid storage in moist or hot conditions, near to heat or ignition sources. Keep away from food, drink and open bodies of water.

10.5 Incompatible materials

Not relevant.

10.6 Hazardous decomposition products

During a fire, irritating and possibly toxic gasses may be generated by thermal decomposition or combustion (carbon and sulphur oxides (CO, CO₂, SO_x))

11.0 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity (product)

Exposure route	Effects
Oral	> 5000 mg/kg (OECD 401)
Dermal	> 2000 mg/kg (OECD 402)
Inhalation	1.51 mg/L of air (OECD 403)
Skin irritation	Non irritant to rabbit skin (OECD 404)
Eye irritation	Irritant for rabbit eyes (OECD 405)
Sensitization	Sensitizing to guinea pig (OECD 406)

Repeated dose toxicity (product)

Exposure route	Effects
Oral	Not relevant.
Dermal	

CMR (carcinogenicity, mutagenicity, reproductive toxicity)

Exposure route	Effects
Carcinogenicity	None
Mutagenicity	None
Reproductive toxicity	None

12.0 ECOTOXICOLOGICAL INFORMATION

12.1 Toxicity

Fish : LC₅₀ (*Oncorhynchus mykiss*, 96 h) = 47.9 mg/l
Invertebrate : EC₅₀ (*Daphnia magna*, 48 h) = 22.9 mg/l
Algae : EC₅₀ (*Scenedesmus subspicatus*, 72 h) = 40.4 mg/l

12.2 Persistence and degradability

The mixture is not expected to be persistent due to a high volatilization potential.
Readily biodegraded: >90% after 14 days; >95% after 28 days (OECD 302B)

12.3 Bioaccumulation potential

Low bioaccumulation potential.

12.4 Mobility in soil

Due to a high volatilisation potential, no leaching to ground water.

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12.5 Results of PBT and vPvB assessment
Not applicable.

12.6 Other adverse effects
Not applicable.

13.0 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Material:

As a liquid waste, this product should be solidified with stabilizing agents (such as sand, fly ash, or cement) so that no free liquid remains before disposal to an industrial waste landfill. Follow local regulations.

Packaging:

Containers should be disposed of by rinsing thoroughly and then offering for recycling or reconditioning or puncture and dispose of in a sanitary landfill. Follow local regulations.

Regulations:

Follow national regulation for waste treatment.

14.0 TRANSPORT INFORMATION

14.1 UN number
UN3082

14.2 UN proper shipping name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE
Liquid N.O.S. (orange oil)

14.3 Transport hazard class(es)
Class 9

14.4 Packing group
III

14.5 Environmental hazards
Marine pollutant : Yes

14.6 Special precautions for user
Not classified

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

15.0 REGULATORY INFORMATION

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

67/548/EEC: Council Directive on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances. (DSD)
1999/45/EEC: Directive of the European Parliament and of the Council concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labeling of dangerous preparations. (DPD)

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648/2004/EEC : Directive of the European Parliament and of the Council of March 31st, 2004 concerning detergents.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

15.2 Chemical safety assessment

No chemical safety assessment was carried out for the mixture.

16.0 OTHER INFORMATION

16.1 Other information

This data sheet was revised in accordance with directive 1999/45/EC, regulation 453/2010/EU (Annex II amended of regulation 1907/2006/EC) and its modifications.

Version of November 06, 2012.

Replace all previous versions.

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