

Safety Data Sheet in accordance with Regulation (EU) No. 1907/2006 as amended

Issuing Date
05-Feb-2018

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29-Jan-2018

Revision Number
2

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

1.1. Product identifier

Product name DigiGuard® 901 OPV Strengthenener

Product code DG901.E

Pure substance/preparation substance

REACH registration number 01-2119513212-58

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

Recommendations on Use Industrial use

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Company Michelman International Belgium SPRL
Zoning Industriel
B-6790 Aubange - Belgium
website : www.michelman.com
e-mail : regulatory@michelman.com
Tel. +32 63 38 18 00
Fax. +32 63 38 96 92

1.4. Emergency telephone number

Emergency Telephone CHEMTREC: +1-703-741-5970 (INTERNATIONAL)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Health/Environmental Hazards

Serious eye damage/eye irritation	Category 1
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The classification(s) of the mixture according to Regulation (EC) 1272/2008 [CLP] is (are) derived using calculation method.

Physical hazards

None.

2.2. Label elements

Symbols/Pictograms



Signal word DANGER

Hazard statements H318 - Causes serious eye damage

Precautionary statements P280 - Wear protective gloves/protective clothing/eye protection/face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	EC-No	CAS No.	Weight-%	CLP CLASSIFICATION EC No. 1272/2008	REACH registration number
3-GLYCIDOXY PROPYL TRIMETHOXYSILANE	219-784-2	2530-83-8	60-100	Eye Dam. 1 (H318)	01-2119513212-58

For the full text of the H-phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Call a physician immediately
Skin contact	Wash off immediately with plenty of water for at least 15 minutes Get medical attention immediately if symptoms occur
Ingestion	Clean mouth with water and drink afterwards plenty of water Do NOT induce vomiting Call a physician immediately
Inhalation	Remove to fresh air If symptoms persist, call a physician
Self-Protection of the First Aider	Use personal protection recommended in Section 8

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

Product may hydrolyse upon contact with body fluids in the gastrointestinal tract to produce additional methanol; therefore, consider the signs/symptoms of methanol poisoning and also observe the known latency period of several days!

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

Treat symptomatically

SECTION 5: Fire fighting measures

5.1. Extinguishing media

In case of fire, use water fog, dry chemical, CO2 or "alcohol resistant" foam

Do not use water jet as an extinguisher, as this will spread the fire. Use water spray to keep fire-exposed containers cool.

5.2. Special hazards arising from the substance or mixture

Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke)

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes, skin and clothing

Use personal protective equipment as required

6.2. Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas

6.3. Methods and material for containment and cleaning up

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

Sweep up and shovel into suitable containers for disposal

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not ingest

Avoid contact with eyes, skin and clothing

Wash thoroughly after handling

Ensure adequate ventilation

Avoid breathing dust or vapor

Handle in accordance with good industrial hygiene and safety practice

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place

Keep away from heat and sources of ignition

Purge opened containers with bone dry inert gas before resealing.

7.3. Specific end use(s)

No information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2. Exposure controls

Engineering Measures	Ensure adequate ventilation, especially in confined areas
Respiratory protection	Respirator with a vapour filter (EN 141). Do not breathe vapors, mist or gas In case of insufficient ventilation wear suitable respiratory equipment
Eye protection	Tightly fitting safety goggles (e.g. EN 166)
Hand protection	For long-term exposure: Butyl rubber gloves Minimum breakthrough time / gloves : 480 min Minimum thickness / gloves 0,7 mm Take note of the information given by the producer concerning permeability and breakthrough times, and of special workplace conditions (mechanical strain, duration of contact)
Skin and body protection	Protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes)
Hygiene Measures	When using do not eat, drink or smoke Take off contaminated clothing and wash before reuse Wash thoroughly after handling

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	liquid
Appearance	colorless
Odor	Ester
Odor Threshold	No information available
pH	No data available
Initial boiling point	290°C (1013 hPa)
Flash Point	110°C
evaporation rate	< 1
Flammability Limit in Air	
Upper	No information available
Lower	No information available
vapor pressure	calculated 0,011 hPa (20 °C)
Vapor Density	No data available
Solubility	No information available
Partition Coefficient	0,5

(n-octanol/water)

Autoignition Temperature	400°C
decomposition temperature	No data available
Viscosity	2 - 5 cPs
Explosive properties	No information available
Oxidizing properties	No information available

9.2. Other information

Liquid Density	1,07 g/cm ³ (20 °C)
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SECTION 10: Stability and reactivity

<u>10.1. Reactivity</u>	None under normal processing
<u>10.2. Chemical stability</u>	Stable under normal conditions
<u>10.3. Possibility of hazardous reactions</u>	Polymerization can occur. Hydrolysis
<u>10.4. Conditions to avoid</u>	Heat, flames and sparks
<u>10.5. Incompatible materials</u>	Reacts with water or moisture to form methanol
<u>10.6. Hazardous decomposition products</u>	Carbon oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity Not classified for acute toxicity based on available data.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
3-GLYCIDOXY PROPYL TRIMETHOXYSILANE	8025 mg/kg (rat)	4.25 (mg/Kg) - Rabbit	>5.3 mg/l, 4h (rat)

skin corrosion/irritation No information available

Chemical name	Skin irritation
3-GLYCIDOXY PROPYL TRIMETHOXYSILANE	OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) (Rabbit): Slightly irritating.

Serious eye damage/eye irritation Risk of serious damage to eyes

Chemical name	Eye Damage
3-GLYCIDOXY PROPYL TRIMETHOXYSILANE	OECD-Guideline 405 (Acute Eye Irritation/Corrosion) (Rabbit): Irritating.

Sensitization No information available

Chemical name	Sensitization
3-GLYCIDOXY PROPYL TRIMETHOXYSILANE	Human patch test: negative Bühler-Patch-Test skin sensitisation on guinea pigs, OECD-Guideline 406 (Skin Sensitisation) (Guinea Pig): negative

Germ cell mutagenicity No information available

Chemical name	Germ cell mutagenicity
3-GLYCIDOXY PROPYL TRIMETHOXYSILANE	Salmonella Typhimurium/ Escherichia coli (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay)): positive Mouse Lymphoma Assay (OECD Guideline 476) (Mouse Lymphoma Assay (OECD Guideline 476)): positive Micronucleus test (mouse) (other methods) Oral: negative Micronucleus test (mouse) (other methods) Intraperitoneal: negative Micronucleus test (mouse) (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)) Intraperitoneal:

	positive
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Carcinogenicity No information available

Reproductive toxicity No information available

STOT - single exposure No information available

STOT - repeated exposure No information available

Chemical name	STOT - repeated exposure
3-GLYCIDOXY PROPYL TRIMETHOXYSILANE	NOAEL (Rat, Oral, 28 d): 1.000 mg/kg NOAEL (Rat, Inhalation, 14 d): 0,225 mg/l

Aspiration Hazard No information available

Other adverse effects Product may hydrolyse upon contact with body fluids in the gastrointestinal tract to produce additional methanol; therefore, consider the signs/symptoms of methanol poisoning and also observe the known latency period of several days!

SECTION 12: Ecological information

12.1. Ecotoxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
3-GLYCIDOXY PROPYL TRIMETHOXYSILANE	EC50 (Algae) = 268 mg/l, 7 days Green algae (Scenedesmus subspicatus) > 420 mg/l, 72 hr \par Green algae (Selenastrum capricornutum) 350 mg/l, 72 hr (Growth rate)	LC50 (Lepomis macrochirus) 276 mg/l, 96 hr LC50 (Oncorhynchus mykiss) 237 mg/l, 96 hr		EC50 (Daphnia) 710 mg/l, 48 hr NOEC (Daphnia) 100 mg/l, 21 days

12.2. Persistence and degradability Not readily biodegradable

12.3. Bioaccumulative potential No data available

12.4. Mobility in soil No data available

12.5. Results of PBT and vPvB assessment No data available

12.6. Other adverse effects No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from Residues / Unused Products Dispose of in accordance with local regulations

Contaminated Packaging Dispose of in accordance with local regulations

SECTION 14: Transport information

IMDG/IMO

Not regulated

ADR

Not regulated

IATA

Not regulated

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****International Inventories**

TSCA (USA)	Complies
DSL (Canada)	Complies
ENCS (Japan)	Complies
IECSC (China)	Complies
KECL (Korea)	Complies
PICCS (Philippines)	Complies
AICS (Australia)	Complies
ERMA (New Zealand)	Complies
Taiwan	Complies

National Regulatory Information**WGK Classification** WGK 2**15.2. Chemical safety assessment**

No Chemical Safety Assessment (CSA) is yet available for the substance, or for the component substances, contained in this product.

SECTION 16: Other information**Full text of H-Statements referred to under sections 2 and 3**

H318 - Causes serious eye damage

Revision date 29-Jan-2018**Revision note**

Not applicable

Disclaimer

The information provided on this SDS 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 as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet