



Product code	–	Page 1 of 14
Product name	<b>COLZOR UNO</b>	July 2019
Safety data sheet according to EU Reg. 1907/2006 as amended		Supersedes 22.02.2018

## SAFETY DATA SHEET

### Colzor Uno

Revision: Sections containing a revision or new information are marked with a ♣.

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




- 1.1. **Product identifier** ..... **Colzor Uno**  
**Contains dimethachlor and hydrocarbons, C10-C13, aromatics, < 1% naphthalene**
- 1.2. **Relevant identified uses of the substance or mixture and uses advised against** ..... Can be used as herbicide only.
- 1.3. **Details of the supplier of the safety data sheet** **FMC Agricultural Solutions A/S**  
Thyborønvej 78  
DK-7673 Harboøre  
Denmark  
[SDS.Ronland@fmc.com](mailto:SDS.Ronland@fmc.com)
- 1.4. **Emergency telephone number**  
Medical emergencies:
- |                                     |   |
|-------------------------------------|---|
| Austria: +43 1 406 43 43            | Luxembourg: +352 8002 5500                                      |
| Belgium: +32 70 245 245             | Netherlands: +31 30 274 88 88                                   |
| Bulgaria: +359 2 9154 409           | Norway: +47 22 591300   |
| Cyprus: 1401                        | Poland: +48 22 619 66 54  |
| Czech Republic: +420 224 919 293    | +48 22 619 08 97  |
| +420 224 915 402                    | Portugal: 808 250 250 (in Portugal only)                        |
| Denmark: +45 82 12 12 12            | +351 21 330 3284  |
| England and Wales: 111              | Romania: +40 21318 3606   |
| Estonia: +372 7943500               | Scotland: +8454 24 24 24  |
| France: +33 (0) 1 45 42 59 59       | Slovakia: +421 2 54 77 4 166                                    |
| Finland: +358 9 471 977             | Slovenia: +386 41 650 500                                       |
| Greece: 30 210 77 93 777            | South Africa: +27 83 123 3911 (Bateleur Emergency Response Co.) |
| Hungary: +36 80 20 11 99            | Spain: +34 91 562 04 20   |
| Ireland (Republic): +353 1 837 9964 | Sweden: +46 08-331231   |
| Italy: +39 02 6610 1029             | 112   |
| Latvia: +371 670 42 473             | Switzerland: 145  |
| 112                                 | Turkey: 114   |
| Lithuania: +370 523 62052           | U.S.A. & Canada: +1 800 / 331 3148                              |
| +370 687 53378                      | All other countries: +1 651 / 632 6793 (Collect)                |

For fire, leak, spill or other accident emergencies:

U.S.A.: +1 800 / 424 9300 (CHEMTREC)  
All other countries: +1 703 / 527 3887 (CHEMTREC - Collect)

Product code	–	Page 2 of 14
Product name	<b>COLZOR UNO</b>	July 2019

## ♣ SECTION 2: HAZARDS IDENTIFICATION

- 2.1. **Classification of the substance or mixture**
- Skin irritation: Category 2 (H315)  
Sensitisation – skin: Category 1 (H317)  
Aspiration toxicity: Category 1 (H304)  
Hazards to the aquatic environment, acute: Category 1 (H400)  
chronic: Category 1 (H410)
- WHO classification ..... Class U (unlikely to present acute hazard in normal use)
- Health hazards ..... The product may cause allergic sensitisation and has irritating properties.
- Environmental hazards ..... The product is very toxic to aquatic organisms.
- 2.2. **Label elements**  
*According to EU Reg. 1272/2008 as amended*
- Product identifier ..... Colzor Uno  
Contains dimethachlor and hydrocarbons, C10-C13, aromatics, < 1% naphthalene
- Hazard pictograms (GHS07, GHS08, GHS09)
- 


- Signal word ..... Danger
- Hazard statements
- H304 ..... May be fatal if swallowed and enters airways.  
H315 ..... Causes skin irritation.  
H317 ..... May cause an allergic skin reaction.  
H410 ..... Very toxic to aquatic life with long lasting effects.
- Supplementary hazard statements
- EUH066 ..... Repeated exposure may cause skin dryness and cracking.  
EUH401 ..... To avoid risks to human health and the environment, comply with the instructions of use.
- Precautionary statements
- P261 ..... Avoid breathing vapours or spray.  
P280 ..... Wear protective gloves.  
P302+P352 ..... IF ON SKIN: Wash with plenty of soap and water.  
P301+P310 ..... IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P331 ..... Do NOT induce vomiting.  
P501 ..... Dispose of contents/container as hazardous waste.
- 2.3. **Other hazards** ..... None of the ingredients in the product meets the criteria for being PBT or vPvB.

## ♣ SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1. **Substances** ..... The product is a mixture, not a substance

Product code	–	Page 3 of 14
Product name	<b>COLZOR UNO</b>	July 2019

3.2. **Mixtures** ..... See section 16 for full text of hazard statements.

**Active ingredient**

<b>Dimethachlor</b> .....	Content: 47.6% by weight
CAS name .....	Acetamide, 2-chloro-N-(2,6-dimethylphenyl)-N-(2-methoxyethyl)-
CAS no. ....	50563-36-5
IUPAC name .....	2-Chloro-N-(2-methoxyethyl)acet-2',6'-xylydide
ISO name/EU name .....	Dimethachlor
EC no. (EINECS no.) .....	256-625-6
EU index no. ....	616-031-00-3
Molecular weight .....	255.7
Classification of the ingredient .....	Acute oral toxicity: Category 4 (H302) Sensitisation – skin: Category 1A (H317) Hazards to the aquatic environment, acute: Category 1 (H400) chronic: Category 1 (H410)

**Reportable ingredients**

	Content (% w/w)	CAS no.	EC no.	Classification
Hydrocarbons, C10-C13, aromatics, < 1% naphthalene Reg. no. 01-2119451097-39	25 - 30		922-153-0	Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411)
Cyclohexanone Reg. no. 01-2119453616-35	10 - 20	108-94-1	EINECS no.: 203-631-1	Flam. Liq. 3 (H226) Acute Tox. 4 (H332)
Isobutanol Reg. no. 01-2119484609-23	1 - 3	78-83-1	EINECS no.: 201-148-0	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 (H335) STOT SE 3 (H336)
Calcium dodecylbenzenesulphonate	1 – 2.5	26264-06-2	EINECS no.: 247-557-8	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)

**♣ SECTION 4: FIRST AID MEASURES**

4.1. **Description of first aid measures**

Inhalation .....	If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance.
Skin contact .....	Immediately remove contaminated clothing and footwear. Flush skin with water. Wash with water and soap. Get medical attention if any symptom develops.
Eye contact .....	Immediately rinse eyes with much water or eyewash solution, occasionally opening eyelids, until no evidence of chemical remains. Remove contact lenses after a few minutes and rinse again. Get medical attention if irritation develops.

Product code	–	Page 4 of 14
Product name	<b>COLZOR UNO</b>	July 2019

Ingestion ..... Let the exposed person rinse mouth and drink several glasses of water or milk, but not induce vomiting. If vomiting does occur, let him/her rinse mouth and drink fluids again. Get medical attention immediately.

4.2. **Most important symptoms and effects, both acute and delayed** Possibly skin irritation and allergic reactions

4.3. **Indication of any immediate medical attention and special treatment needed** Immediate medical attention is required in case of ingestion.  
It may be helpful to show this safety data sheet to physician.

Notes to physician ..... A specific antidote for exposure to this material is not known. Gastric lavage and/or the administration of activated charcoal can be considered. After decontamination, treatment should be directed at the control of symptoms and the clinical condition.

The product contains petroleum distillates which may pose an aspiration pneumonia hazard.

#### ♣ SECTION 5: FIRE-FIGHTING MEASURES

5.1. **Extinguishing media** ..... Dry chemical or carbon dioxide for small fires, water spray or foam for large fires. Avoid heavy hose streams.

5.2. **Special hazards arising from the substance or mixture** The essential breakdown products are volatile, malodorous, toxic, irritant and inflammable compounds such as hydrogen chloride, nitrogen oxides, sulphur dioxide, carbon monoxide, carbon dioxide and various chlorinated organic compounds.

5.3. **Advice for firefighters** ..... Use water spray to keep fire-exposed containers cool. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Fight fire from protected location or maximum possible distance. Dike area to prevent water runoff. Firemen should wear self-contained breathing apparatus and protective clothing.

#### ♣ SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. **Personal precautions, protective equipment and emergency procedures** It is recommended to have a predetermined plan for the handling of spills. Empty, closable vessels for the collection of spills should be available.

In case of large spill (involving 10 tonnes of the product or more):  
1. use personal protection equipment; see section 8  
2. call emergency telephone no.; see section 1  
3. alert authorities.

Observe all safety precautions when cleaning up spills. Use personal protection equipment. Depending on the magnitude of the spill this may mean wearing respirator, face mask or eye protection, chemical resistant clothing, gloves and rubber boots.

Stop the source of the spill immediately if safe to do so. Keep unprotected persons away from the spill area. Avoid and reduce formation of vapour or mist as much as possible.

Product code	–	Page 5 of 14
Product name	<b>COLZOR UNO</b>	July 2019

- 6.2. **Environmental precautions** ..... Contain the spill to prevent any further contamination of surface, soil or water. Wash waters must be prevented from entering surface water drains. Uncontrolled discharge into water courses must be alerted to the appropriate regulatory body.
- 6.3. **Methods and materials for containment and cleaning up**
- It is recommended to consider possibilities to prevent damaging effects of spills, such as bunding or capping. See GHS (Annex 4, Section 6).
- If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should be absorbed onto an absorptive material such as universal binder, Fuller's earth or other absorbent clays. Collect the contaminated absorbent in suitable containers. Clean area with detergent and much water. Absorb wash liquid with absorbent and transfer to suitable containers. The used containers should be properly closed and labelled.
- Large spills which soak into the ground should be dug up and transferred to suitable containers.
- Spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal.
- 6.4. **Reference to other sections** ..... See subsection 8.2. for personal protection.  
See section 13 for disposal.

## ♣ SECTION 7: HANDLING AND STORAGE

- 7.1. **Precautions for safe handling** .... In an industrial environment it is recommended to avoid all personal contact with the product, if possible by using closed systems with remote system control. The material should be handled by mechanical means as much as possible. Adequate ventilation or local exhaust ventilation is required. The exhaust gases should be filtered or treated otherwise. For personal protection in this situation, see section 8.
- For its use as a pesticide, first look for precautions and personal protection measures on the officially approved label on the packaging or for other official guidance or policy in force. If these are lacking, see section 8.
- Remove contaminated clothing immediately. Wash thoroughly after handling. Before removing gloves, wash them with water and soap. After work, take off all work clothes and footwear. Take a shower, using water and soap. Wear only clean clothes when leaving job. Wash protective clothing and protective equipment with water and soap after each use.
- Inhalation of vapours of the product can cause lowered consciousness, which increases the risks of operating machinery and driving.
- Do not discharge to the environment. Do not contaminate water when disposing of equipment wash waters. Collect all waste material and remains from cleaning equipment, etc., and dispose of as hazardous waste. See section 13 for disposal.

Product code	–	Page 6 of 14
Product name	<b>COLZOR UNO</b>	July 2019

**7.2. Conditions for safe storage, including any incompatibilities**

The product is stable under normal conditions of warehouse storage. Protect against cold and extreme heat. Recommended storage temperature 10 - 35°C.

Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading “POISON” is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

**7.3. Specific end use(s)** .....

The product is a registered pesticide which may only be used for the applications it is registered for, in accordance with a label approved by the regulatory authorities.

**♣ SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

Personal exposure limits .....

To our knowledge not established for the active ingredient dimethachlor in this product. A personal exposure limit of 5 mg/m<sup>3</sup> (TWA) is recommended by the manufacturer.

**Aromatic hydrocarbons** .....

100 ppm total hydrocarbon is recommended.

**Cyclo-hexanone**      ACGIH (USA) TLV

Year

2015      TWA 20 ppm

STEL 50 ppm

Skin notation; BEI

OSHA (USA) PEL

2015      TWA 50 ppm (200 mg/m<sup>3</sup>)

EU, 2000/39/EC

2017      8-hr TWA 10 ppm (40.8 mg/m<sup>3</sup>)

as amended

Peak level 20 ppm (81.6 mg/m<sup>3</sup>); max. duration 15 min.

Skin notation

Germany, MAK

2014      Skin notation; EKA

HSE (UK) WEL

2011      8-hr TWA 10 ppm (41 mg/m<sup>3</sup>)

STEL 20 ppm (82 mg/m<sup>3</sup>); 15-minute reference period

Skin notation; BMGV

However, other personal exposure limits defined by local regulations may exist and must be observed.

**Dimethachlor**

DNEL .....

Not established

PNEC, aquatic environment .....

The EFSA has established an AOEL of 0.1 mg/kg bw/day

46 ng/l

**Aromatic hydrocarbons**

DNEL, dermal .....

12.5 mg/kg bw/day

DNEL, inhalation .....

151 mg/m<sup>3</sup>

PNEC, aquatic environment .....

Not applicable

Product code	–	Page 7 of 14
Product name	<b>COLZOR UNO</b>	July 2019

#### Cyclohexanone

DNEL, dermal .....	10 mg/kg bw/day
DNEL, inhalation .....	100 mg/m <sup>3</sup>
PNEC, aquatic .....	0.0329 mg/l

#### 8.2. Exposure controls .....

When used in a closed system, personal protection equipment will not be required. The following is meant for other situations, when the use of a closed system is not possible, or when it is necessary to open the system. Consider the need to render equipment or piping systems non-hazardous before opening.

The precautions mentioned below are primarily meant for handling of the undiluted product and for preparing the spray solution, but can be recommended for spraying as well.

In cases of incidental high exposure, maximal personal protection may be necessary, such as respirator, face mask, chemical resistant coveralls.



#### Respiratory protection

In the event of an accidental discharge of the material which produces a heavy vapour or mist, workers must put on officially approved respiratory protection equipment with a universal filter type including particle filter.



#### Protective gloves .....

Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber. The breakthrough times of these materials for the product are unknown. Generally, however, the use of protective gloves will give only partial protection against dermal exposure. Small tears in the gloves and cross-contamination can easily occur. It is recommended to limit the work to be done manually and to change the gloves frequently.



#### Eye protection .....

Wear safety glasses. It is recommended to have an eye wash fountain immediately available in the workplace when there is a potential for eye contact.



#### Other skin protection

Wear appropriate chemical resistant clothing to prevent skin contact depending on the extent of exposure. During most normal work situations where exposure to the material cannot be avoided for a limited time span, waterproof pants and apron of chemical resistant material or coveralls of polyethylene (PE) will be sufficient. Coveralls of PE must be discarded after use if contaminated. In cases of excessive or prolonged exposure, coveralls of barrier laminate may be required.

### ♣ SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Information on physical and chemical properties

Appearance .....	Yellow to brown liquid
Odour .....	Of aromatic hydrocarbons
Odour threshold .....	Not determined
pH .....	1% dispersion in water: 5.3
Melting point/freezing point .....	Not determined
Initial boiling point and boiling range	> 125°C

Product code	–	Page 8 of 14
Product name	<b>COLZOR UNO</b>	July 2019

Flash point .....	65°C (Pensky-Martens closed cup)
Evaporation rate .....	(Butyl acetate = 1) <b>Aromatic hydrocarbons</b> : < 0.01 <b>Cyclohexanone</b> : 0.3
Flammability (solid/gas) .....	Not applicable (liquid)
Upper/lower flammability or explosive limits	<b>Aromatic hydrocarbons</b> : 0.6 - 7.0 vol% ( $\approx$ 0.6 - 7.0 kPa) <b>Cyclohexanone</b> : 1 - 9.4 vol% ( $\approx$ 1 - 9.4 kPa)
Vapour pressure .....	<b>Aromatic hydrocarbons</b> : < 0.1 kPa at 25°C <b>Cyclohexanone</b> : 0.47 kPa at 20°C
Vapour density .....	(Air = 1) <b>Aromatic hydrocarbons</b> : > 1 <b>Cyclohexanone</b> : 3.4
Relative density .....	Not determined
Solubility(ies) .....	Density. 1.04 – 1.08 g/ml Not available
Partition coefficient n-octanol/water	<b>Dimethachlor</b> : $\log K_{ow} = 2.17$ at 25°C <b>Aromatic hydrocarbons</b> : some of the main components have $\log K_{ow} = 4.0 - 4.4$ at 25°C by model calculation <b>Cyclohexanone</b> : $\log K_{ow} = 0.86$ at 25°C
Autoignition temperature .....	450°C
Decomposition temperature .....	160°C
Viscosity .....	7.01 mm <sup>2</sup> /s at 40°C
Explosive properties .....	Not explosive
Oxidising properties .....	Not oxidising

## 9.2. Other information

Miscibility .....	The product is dispersible in water.
-------------------	--------------------------------------

## ♣ SECTION 10: STABILITY AND REACTIVITY

10.1. <b>Reactivity</b> .....	To our knowledge, the product has no special reactivities.
10.2. <b>Chemical stability</b> .....	The product is stable during normal handling and storage at ambient temperatures.
10.3. <b>Possibility of hazardous reactions</b>	None known.
10.4. <b>Conditions to avoid</b> .....	Heating of the product will evolve harmful and irritant vapours.
10.5. <b>Incompatible materials</b> .....	None known.
10.6. <b>Hazardous decomposition products</b>	See subsection 5.2.

## ♣ SECTION 11: TOXICOLOGICAL INFORMATION

11.1. <b>Information on toxicological effects</b>	* = Based on available data, the classification criteria are not met.
---	---

### Product

Acute toxicity .....	The product is not considered as harmful by single exposure. * The acute toxicity is measured as:
Route(s) of entry	- ingestion LD <sub>50</sub> , oral, rat: > 2000 mg/kg
	- skin LD <sub>50</sub> , dermal, rat: > 4000 mg/kg
	- inhalation LC <sub>50</sub> , inhalation, rat: > 20 mg/l/4 h



Product code	–	Page 9 of 14
Product name	<b>COLZOR UNO</b>	July 2019

Skin corrosion/irritation .....	Irritating to skin. May cause skin dryness.
Serious eye damage/irritation .....	Not irritating to eyes.
Respiratory or skin sensitisation ...	Sensitising (method OECD 406).
Germ cell mutagenicity .....	The product contains no ingredients known to be mutagenic. *
Carcinogenicity .....	The product contains no ingredients known to be carcinogenic. *
Reproductive toxicity .....	The product contains no ingredients known to have adverse effects on reproduction. *
STOT – single exposure .....	To our knowledge, no specific effects have been observed after single exposure. *
STOT – repeated exposure .....	The following has been measured on the active ingredient dimethachlor: Target organ: liver NOEL: 30 ppm (2.21 mg/kg bw/day) in a 90-day rat study (method OECD 408) based on increased liver weight and increased plasma total protein and globulin.
Aspiration hazard .....	The product presents an aspiration hazard.
Symptoms and effects, acute and delayed .....	Possibly skin irritation and allergic reactions.

#### Dimethachlor

Toxicokinetics, metabolism and distribution	After oral intake, dimethachlor is rapidly absorbed and widely distributed in the body. It is almost completely metabolised. It is excreted with half-lives of typically 2 - 3 weeks. There is no evidence of accumulation.
Acute toxicity .....	Dimethachlor is harmful by ingestion. It is not considered harmful by skin contact or inhalation. The acute toxicity is measured as:
Route(s) of entry - ingestion	LD <sub>50</sub> , oral, rat: 1600 mg/kg
- skin	LD <sub>50</sub> , dermal, rat: > 2000 mg/kg (method OECD 402) *
- inhalation	LC <sub>50</sub> , inhalation, rat: > 4.45 mg/l/4 h (method OECD 403) *
Skin corrosion/irritation .....	Mildly to moderately irritating to skin (method OECD 404). *
Serious eye damage/irritation .....	Slightly irritating to eyes (method OECD 405). *
Respiratory or skin sensitisation ...	Skin sensitizer (method OECD 406).

#### Hydrocarbons, C10-C13, aromatics, < 1% naphthalene

Acute toxicity .....	The substance is not considered as harmful. * The acute toxicity as measured on a similar product is:
Route(s) of entry - ingestion	LD <sub>50</sub> , oral, rat: > 5000 mg/kg (method OECD 401)
- skin	LD <sub>50</sub> , dermal, rat: > 2000 mg/kg (method OECD 402)

Product code	—	Page 10 of 14
Product name	<b>COLZOR UNO</b>	July 2019

- inhalation	LC <sub>50</sub> , inhalation, rat: > 4.7 mg/l (method OECD 403)
Skin corrosion/irritation .....	Can cause skin dryness (measured on similar products; method OECD 404).
Serious eye damage/irritation .....	May cause mild, short-lasting discomfort to eyes (measured on similar products; method OECD 405). *
Respiratory or skin sensitisation ...	Not expected to cause respiratory or skin sensitisation (measured on similar products; method OECD 406). *
Aspiration hazard .....	Aromatic hydrocarbons present an aspiration hazard.
<b><u>Cyclohexanone</u></b>	
Toxicokinetics, metabolism and distribution	After oral intake, cyclohexanone is readily absorbed and widely distributed in the body. It is extensively metabolised to natural body constituents and partially taken up in the organism.
Acute toxicity .....	Cyclohexanone is harmful by inhalation. It may have harmful effects by ingestion and skin contact as well. Study results for inhalation toxicity are divergent. The acute toxicity is measured as:
Route(s) of entry - ingestion	LD <sub>50</sub> , oral, rat: 1820 mg/kg (average of 6 study results)
- skin	LD <sub>50</sub> , dermal, rabbit: 950 mg/kg (average of 5 study results)
- inhalation	LC <sub>50</sub> , inhalation, rat: 3 - 30 mg/l/4 h
Skin corrosion/irritation .....	Cyclohexanone has irritating properties to skin as has been found in several studies. It is not clear if the classification criteria are met.
Serious eye damage/irritation .....	Cyclohexanone has irritating properties to eyes as has been found in several studies. It is not clear if the classification criteria are met.
Respiratory or skin sensitisation ...	To our knowledge, no indications of allergenic effects have been reported. Negative results were found in a number of tests. *
<b><u>Isobutanol</u></b>	
Toxicokinetics, metabolism and distribution	Isobutanol is rapidly absorbed following oral administration or inhalation exposure. Isobutanol is metabolised to isobutyraldehyde and isobutyric acid.
Acute toxicity .....	Isobutanol is not considered as harmful. * The acute toxicity is measured as:
Route(s) of entry - ingestion	LD <sub>50</sub> , oral, rat (male): > 2830 mg/kg (method OECD 401) LD <sub>50</sub> , oral, rat (female): 3350 mg/kg (method OECD 401)
- skin	LD <sub>50</sub> , dermal, rabbit: > 2000 mg/kg (method OECD 402)
- inhalation	LC <sub>50</sub> , inhalation, rat: > 18.12 mg/l/4 h (method 40 CFR 798.1150)
Skin corrosion/irritation .....	Not irritating to rabbit skin (method OECD 404).
Serious eye damage/irritation .....	Severely irritating to eyes (method OECD 405).

Product code	–	Page 11 of 14
Product name	<b>COLZOR UNO</b>	July 2019

Respiratory or skin sensitisation ... Not sensitising to guinea pigs (method OECD 406). To our knowledge, no indications of allergenic properties have been recorded.  
\*

#### Calcium dodecylbenzenesulphonate

Acute toxicity ..... The substance is not considered as harmful by skin contact, ingestion and inhalation. \* The acute toxicity is measured as:

Route(s) of entry	- ingestion	LD <sub>50</sub> , oral, rat: 4000 mg/kg
	- skin	LD <sub>50</sub> , dermal, rat: not available
	- inhalation	LC <sub>50</sub> , inhalation, rat: not available

Skin corrosion/irritation ..... Irritating to skin.

Serious eye damage/irritation ..... Irritating to eyes with the potential to cause permanent eye damage.

### ♣ SECTION 12: ECOLOGICAL INFORMATION

12.1. **Toxicity** ..... The product is a herbicide and must therefore be expected to be harmful to all plants. It is toxic to algae, but it is considered as non-toxic to daphnids, fish, soil micro- and macroorganisms, birds and insects.

The ecotoxicity measured on the product is:

- Fish	Rainbow trout ( <i>Oncorhynchus mykiss</i> )	96-h LC <sub>50</sub> : 14.8 mg/l
- Invertebrates	Daphnids ( <i>Daphnia magna</i> )	48-h EC <sub>50</sub> : 18.1 mg/l
- Algae	Green algae ( <i>Pseudokirchneriella subcapitata</i> )	72-h E <sub>r</sub> C <sub>50</sub> : 0.034 mg/l

12.2. **Persistence and degradability** .... **Dimethachlor** is biodegradable, but does not meet the criteria for being readily biodegradable. Primary degradation half-lives in soil are one to two weeks. Degradation products are degraded slower.

**Aromatic hydrocarbons** are readily biodegradable as measured according to OECD guidelines. However, they are not always rapidly degraded in the environment, but are expected to be degraded at a moderate rate, depending on circumstances.

The product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water treatment plants.

12.3. **Bioaccumulative potential** ..... See section 9 for octanol-water partition coefficients.

For **dimethachlor**, bioaccumulation is not to be expected based on its solubility in water.

**Aromatic hydrocarbons** have a potential to bioaccumulate if continuous exposure is maintained. Most components can be metabolised by many organisms. Bioaccumulation factors (BCFs) of some of the main components are 1200 - 3200 by model calculation.

12.4. **Mobility in soil** ..... Under normal conditions **dimethachlor** is slightly mobile in soil.

Product code	–	Page 12 of 14
Product name	<b>COLZOR UNO</b>	July 2019

**Aromatic hydrocarbons** are not mobile in the environment, but are volatile and will evaporate to the air if released onto water or on the surface of soil. They float and can migrate to sediment.

12.5. **Results of PBT and vPvB assessment** ..... None of the ingredients meets the criteria for being PBT or vPvB.

12.6. **Other adverse effects** ..... Other relevant hazardous effects in the environment are not known.

#### ♣ SECTION 13: DISPOSAL CONSIDERATIONS

13.1. **Waste treatment methods** ..... Remaining quantities of the material and empty but unclean packaging should be regarded as hazardous waste.

Disposal of waste and packagings must always be in accordance with all applicable local regulations.

Disposal of product ..... According to the Waste Framework Directive (2008/98/EC), possibilities for reuse or reprocessing should first be considered. If this is not feasible, the material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing.

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Disposal of packaging ..... It is recommended to consider possible ways of disposal in the following order:  
1. Reuse or recycling should first be considered. Reuse is prohibited except for the authorisation holder. If offered for recycling, containers must be emptied and triply rinsed (or equivalent). Do not discharge rinsing water to sewer systems.  
2. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.  
3. Delivery of the packaging to a licensed service for disposal of hazardous waste.  
4. Disposal in a landfill or burning in open air should only occur as a last resort. For disposal in a landfill, containers should be emptied completely, rinsed and punctured to make them unusable for other purposes. If burned, stay out of smoke.

#### ♣ SECTION 14: TRANSPORT INFORMATION

##### ADR/RID/IMDG/IATA/ICAO classification

14.1. **UN number** ..... 3082

14.2. **UN proper shipping name** ..... Environmentally hazardous substance, liquid, n.o.s. (dimethachlor and alkyl(C3-C6)benzenes)

14.3. **Transport hazard class(es)** ..... 9

14.4. **Packing group** ..... III

Product code	–	Page 13 of 14
Product name	<b>COLZOR UNO</b>	July 2019

- 14.5. **Environmental hazards** ..... Marine pollutant
- 14.6. **Special precautions for user** ..... Avoid any unnecessary contact with the product. Misuse can result in damage to health. Do not discharge to the environment.
- 14.7. **Transport in bulk according to Annex II of MARPOL and the IBC code** ..... The product is not transported in bulk by ship.

#### ♣ SECTION 15: REGULATORY INFORMATION

- 15.1. **Safety, health and environmental regulations/legislation specific for the substance or mixture** ..... Seveso category (Dir. 2012/18/EU): dangerous for the environment  
The Young Worker Directive (94/33/EC) prohibits people under the age of 18 to work with this product.
- 15.2. **Chemical safety assessment** ..... A chemical safety assessment is not required to be included for this product.

#### ♣ SECTION 16: OTHER INFORMATION

- Relevant changes in the safety data sheet ..... Numerous changes have been made to adapt the format of the safety data sheet, but these do not involve new information concerning hazardous properties.
- List of abbreviations ..... ACGIH American Conference of Governmental Industrial Hygienists  
AOEL Acceptable Operator Exposure Level  
BEI Biological Exposure Index  
BMGV Biological Monitoring Guidance Value  
CAS Chemical Abstracts Service  
Dir. Directive  
DNEL Derived No Effect Level  
EC European Community  
EC<sub>50</sub> 50% Effect Concentration  
E<sub>r</sub>C<sub>50</sub> 50% Effect Concentration based on growth  
EFSA European Food Safety Authority  
EINECS European INventory of Existing Commercial Chemical Substances  
EKA Expositionsäquivalent für Krebserzeugende Arbeitsstoffe  
GHS Globally Harmonized classification and labelling System of chemicals, Fifth revised edition 2013  
HSE Health & Safety Executive, UK  
IBC International Bulk Chemical code  
ISO International Organisation for Standardization  
IUPAC International Union of Pure and Applied Chemistry  
LC<sub>50</sub> 50% Lethal Concentration  
LD<sub>50</sub> 50% Lethal Dose  
MAK Maximale Arbeitsplatz-Konzentration  
MARPOL Set of rules from the International Maritime Organisation (IMO) for prevention of sea pollution  
NOEL No Observed Effect Level  
n.o.s. Not otherwise specified  
OECD Organisation for Economic Cooperation and Development  
OSHA Occupational Safety and Health Administration

Product code	–	Page 14 of 14
Product name	<b>COLZOR UNO</b>	July 2019

PBT	Persistent, Bioaccumulative, Toxic
PEL	Personal Exposure Limit
PNEC	Predicted No Effect Concentration
Reg.	Regulation
STEL	Short-Term Exposure Limit
STOT	Specific Target Organ Toxicity
TLV	Threshold Limit Value
TWA	Time Weighted Average
vPvB	very Persistent, very Bioaccumulative
WEL	Workplace Exposure Level
WHO	World Health Organisation

References ..... Data measured on the product are unpublished company data. Data on ingredients are available from published literature and can be found several places.

Method for classification ..... Test data

Used hazard statements .....  
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.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
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.  
EUH066 Repeated exposure may cause skin dryness and cracking.  
EUH401 To avoid risks to human health and the environment, comply with the instructions of use.

Advice on training ..... This material should only be used by persons who are made aware of its hazardous properties and have been instructed in the required safety precautions.

The information provided in this safety data sheet is believed to be accurate and reliable, but uses of the product vary and situations unforeseen by FMC Corporation may exist. The user has to check the validity of the information under local circumstances.

Prepared by: FMC Agricultural Solutions A/S / GHB