



MATERIAL SAFETY DATA SHEET

Rapeseed meal

Revision: 4

Valid from: 1.10.2021

No. of pages: 13

This MSDS is not required by Article 31 of Regulation (EC) 1907/2006 (REACH) as the relevant substance is not classified as hazardous, however, to comply with Article 32 of REACH Regulation and provide customers with relevant information, the format of the SDS according to Commission Regulation (EU) No. 2020/878 has been used.

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Substance name	CAS No.	EINECS No.	Registration number
Rapeseed meal	Unassigned	Unassigned	Unassigned – Registration under REACH not required

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

Uses	Substance/mixture/article	Industrial user/professional user/consumer
Ingredient in compound feed	Substance	Professional users/Industrial users

The substance is not classified as hazardous under Regulation on Classification, Labelling and Packaging (CLP) EC 1272/2008, therefore there are not uses advised against.

1.3 Details of the supplier of the safety data sheet

- PREOL, a.s.**
 Terežínská 1214
 410 02 Lovosice
 Czech Republic
 Tel: +420 416 564 913
 Mob: +420 601 395 017
 Contact person (MSDS): ondrej.klir@preol.cz

1.4 Emergency telephone number

- Toxicological Information Centre (TIC – Czech Republic)**
 Na bojišti 1,
 12808 Praha 2;
 Tel. (24h): +420 224 91 92 93; +420 224 91 54 02; +420 224 91 45 75; +420 224 97 11 11
- Transport Information and Emergency System (TRINS - Czech Republic)**
 It provides continuous training and practical assistance in dealing with emergencies associated with the transport or storage of hazardous chemicals in the Czech Republic. The assistance is provided via fire operational brigade (HZS) centers or via the national coordination center of Chemopetrol, a.s. in Litvinov.

Contact telephone TRINS: + 4 2 0 4 7 6 7 0 9 8 2 6

2. Hazards identification

2.1 Classification of the substance or mixture

Classification under Regulation (EC) No 1272/2008 (CLP)

No classification

Most important adverse physicochemical, human health and environmental effects

Substance is not classified as hazardous.
See also section 2.3.

2.2 Label elements

Label elements according to Regulation (EC) No. 1272/2008 (CLP)

Not relevant, substance is not classified as hazardous.

2.3 Other hazards

PBT (Persistent, Bioaccumulative and Toxic) or vPvB (very Persistent and very Bioaccumulative) criteria

Substance does not meet the criteria to be considered PBT neither vPvB

Properties causing endocrine system disorder

Substance was not added into the list of substances causing endocrine system disorder based on the article no. 59, paragraph 1 of the European parliament and Council regulation (ES) 1907/2006 and was not determined as a substance with properties causing endocrine system disorder based on the Council regulation 2017/2100 and 2018/605.

Other hazards

- Eye contact: May cause irritation of the affected eye
- Skin contact: Prolonged or repeated contact is not likely to produce significant skin irritation.
- Inhalation: Negligible effects unless dispersion of dust or burning smoke in the event of ignition.
If there is dust or smoke inhalation, remove patient to fresh air.
- Ingestion: No health risks arise from accidental ingestion
- Dust explosion: In case of air dispersion, a dust explosive mixture may be formed

3. Composition/information on ingredients

3.1 Substances

Chemical identity of the main constituent of the substance

Main constituent

EC name:	Rapeseed meal
EC number:	Unassigned

CAS number (EC inventory):	Unassigned
CAS name:	UVCB substance, for CAS name information it is possible to refer to the different composition substances.
IUPAC name:	UVCB substance, no IUPAC name available.

Description:	By-product formed during the production of crude vegetable oil from rape seed. Biomass resulting from rape seeds after pressing and subsequent oil extraction via solvent (hexane) and solvent removal.
Molecular formula:	UVCB substance, not univocal molecular formula available
Molecular weight range:	UVCB substance, not univocal molecular weight available
Specific concentration limit:	Not available (substance is not included in the regulation (ES) no. 1272/2008, annex VI, part 3, neither the value was determined based on the annex I of the same regulation)
Multiplication factor:	Not available (substance is not included in the regulation (ES) no. 1272/2008, annex VI, part 3, neither the value was determined based on the annex I of the same regulation)
Acute toxicity estimation:	Not available (substance is not included in the regulation (ES) no. 1272/2008, annex VI, part 3, neither the value was determined based on the annex I of the same regulation)
Nanoform characteristics:	Substance does not include any nanoform

Chemical identity of any relevant impurity, stabilizing additive, or individual constituent other than the main constituent

None.

3.2 Mixtures

Not relevant as substance is not a mixture.

4. First aid measures

4.1 Description of first aid measures

*First aid instructions***GENERAL ADVICE**

In case of accident or if you feel unwell, seek medical advice immediately (identify the substance to the medical staff by showing the label when possible).

EYES

Irrigate eyes with a heavy stream of water for at least 15 to 20 minutes.

SKIN

Wash with soap and plenty of water.

INHALATION

In case of dust or smoke exposure, remove casualty from exposure ensuring one's own safety whilst doing so; seek medical attention if symptoms persist.

INGESTION

Do not induce vomiting without medical advice. Wash out mouth with water. If conscious, give half a liter of water to drink. If gastro-intestinal symptoms develop, consult medical personnel. (Never give anything by mouth to an unconscious person)

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

See 2.3

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

Not relevant for this substance.

5. Fire fighting measures**5.1 Extinguishing media***Extinguishing media*

Appropriate extinguishing media.

Dry chemical powder, alcohol resistant foam, CO₂, water spray (fog).

5.2 Special hazards arising from the substance or mixture*Special hazards*

In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

Combustion of rapeseed meal generates irritating smoke.

Diffusion of fines and dust of rapeseed meal in the air can explode.

5.3 Advice for firefighters

*Advice for firefighters*Protective equipment for Fire-fighters:

Use self-contained breathing apparatus to avoid exposure to smoke and vapour.
Wear fire-resistant clothing to prevent contact with skin and eyes.

6. Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

6.1.1 For non-emergency personnel

Personal precautions, protective equipment and emergency procedures.

Wear protective gloves and goggles when manipulating rape meal.
Eliminate all sources of ignition.

6.1.2 For emergency responders

Advice for firefighters

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6.2 Environmental precautions*Environmental precautions*

Do not discharge into drains, sewerage or waters. For contaminated material disposal contact a specialized company.

6.3 Methods and material for containment and cleaning up*6.3.1 Spill containment*

Stop the leak of material. Remove all ignition sources near the material leaked. Collect the leaked material reducing the area as much as possible by using shovels, brooms or bulldozers for vast leaks.

6.3.2 Spill clean-up

Pick up small spills with shovels and brooms and dispose properly.
Recover large spills for salvage or disposal by authorized personnel.

6.3.3 Other information

Not relevant for this substance

6.4 Reference to other sections

Reference to other sections

See also sections 8 and 13

7. Handling and storage**7.1 Precautions for safe handling**

Note: **Rapeseed Meal** is not classified as hazardous according to CLP Regulation (EC) No. 1272/2008. Specific Risk Management Measures are therefore not required. Nevertheless, the exposure of workers during and after normal operations should be minimized by the use of good industrial hygiene practice.

7.1.1 Recommendations for safe handling

Use gloves and goggles when handling.

7.1.2 Occupational hygiene advice.

Do not eat, drink or smoke in work areas; wash hands after use; and remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities*Safe storage conditions*

Dry storage is recommended to prevent microbiological deterioration (maximum humidity 14%). The storage rooms should be protected against pests, birds and rodents to prevent contamination (e.g. salmonellae).

Keep away from oxidizing agents, excessive heat, and ignition sources.

The dispersion of dust during loading/unloading should be kept as low as possible.

7.3 Specific end use(s)*Reference to other sections*

See section 1.2

8. Exposure controls/personal protection**8.1 Control parameters***Control parameters*

Exposure limits are not established.

DNEL and PNEC values

Not available

8.2 Exposure controls*8.2.1 Appropriate engineering controls*

No relevant engineering controls.

8.2.2 Individual protection measures**EYES AND FACE PROTECTION:**

Safety glasses, goggles, or face shield recommended to protect eyes when handling.

HANDS PROTECTION:

Safety rubber gloves are recommended to prevent skin contact.

RESPIRATORY PROTECTION:

If dust or burning smoke is generated, wear an approved organic dust/smoke respirator.

OTHER PROTECTIVE MEASURES:

Employees must practice good personal hygiene, washing exposed areas of skin several times daily and laundering contaminated clothing before re-use.

8.2.3 Environmental exposure controls

Prevent product from entering drains. Is not allowed to pour any amount of the product to the sewerage or water pipes.

9. Physical and chemical properties**9.1 Information on basic physical and chemical properties***Overview of physicochemical properties*

Appearance	Finely grained brown solid
Odour	Mild. Characteristic of feeding stuffs.
Odour threshold	N/A
pH	N/A
Melting point/freezing point	N/A
Initial boiling point and boiling range	N/A
Flash point	≈ 465°C
Evaporation rate	N/A
Flammability (solid, gas)	Solid flammable
Upper/lower flammability or explosive limits	Lower explosive limit: 76 g/m ³
Vapour pressure	N/A
Vapour density	N/A
Relative density	≈ 0.600 g/cm ³ at 20°C
Solubility(ies)	Insoluble in water

<i>Overview of physicochemical properties</i>	
Partition coefficient n-octanol/water	N/A
Auto-ignition temperature	≈ 505°C
Decomposition temperature	N/A
Viscosity	N/A
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing
Particle characterization	Granular material with a portion of larger particles with a diameter of max. 3 cm, free of foreign impurities and other harmful ingredients

9.2 Other information

<i>Other information</i>
N/A

10. Stability and reactivity

10.1 Reactivity

<i>Reactivity hazards</i>
This product is stable and hazardous reaction will not occur under appropriate storage conditions.

10.2 Chemical stability

<i>Chemical stability</i>
The substance is stable under normal ambient and hazardous reaction will not occur under appropriate storage conditions.

10.3 Possibility of hazardous reactions

<i>Possibility of hazardous reactions</i>
Large amounts of finely dispersed rapeseed meal dust in air might explode.

10.4 Conditions to avoid*Conditions to avoid*

Protect against pests, birds and rodents to prevent microbiological contamination (e.g. salmonellae). Keep away from excessive heat and ignition sources.

10.5 Incompatible materials*Incompatible materials*

Strong oxidizing agents. Strong bases.

10.6 Hazardous decomposition products*Hazardous decomposition products*

Combustion produces carbon monoxide, carbon dioxide along with thick smoke.

11. Toxicological information**11.1 Information on toxicological effects***Information on the following hazard classes:*

<i>Hazard class</i>		<i>Result</i>	<i>Test method</i>
Acute toxicity	Oral:	Non toxic	
	Dermal:	Non toxic	
Skin corrosion/irritation;		None	
Serious eye damage/irritation;		N/A	
Sensitisation;	Respiratory sensitisation	N/A	
	Skin sensitisation;	N/A	
Germ cell mutagenicity;	Reverse gene mutation assay	N/A	
	In vitro cytogenicity test	N/A	
	In vitro mammalian cell mutation test.	N/A	
Carcinogenicity;		N/A	
Reproductive toxicity;	Developmental effects	N/A	
	Fertility effects		
STOT-single exposure;		No information	No information
STOT-repeated exposure;		No information	
Aspiration hazard.		No information	No information

CMR (Carcinogenic, Mutagenic and Repro-toxic) properties assessment

None

The effects of the substance via each possible route of exposure

See section 2 for effects of the substance.

Potential adverse health effects and symptoms

See section 2 for effects of the substance.

Information on whether delayed or immediate effects

See section 2 for effects of the substance.

Interactions

None expected.

11.2 Information regarding other potential hazards*Other information*

See section 2 for effects of the substance

Properties causing endocrine system disorder

No adverse effects on human health expected, since the substance was not added into the list of substances causing endocrine system disorder based on the article no. 59, paragraph 1 of the European parliament and Council regulation (ES) 1907/2006 and was not determined as a substance with properties causing endocrine system disorder based on the Council regulation 2017/2100 and 2018/605 (see section 2)

12. Ecological information**12.1 Toxicity**

Unassigned - material is not classified as toxic.

12.2 Persistence and degradability

Product with high biodegradability

12.3 Bioaccumulative potential

Unassigned – not hazardous product

12.4 Mobility in soil

Unassigned – not hazardous product

12.5 Results of PBT and vPvB assessment

Substance is not considered PBT either vPvB.

12.6 Properties causing endocrine system disorder*Properties causing endocrine system disorder*

No adverse effects on the environment expected, since the substance was not added into the list of substances causing endocrine system disorder based on the article no. 59, paragraph 1 of the European parliament and Council regulation (ES) 1907/2006 and was not determined as a substance with properties causing endocrine system disorder based on the Council regulation 2017/2100 and 2018/605 (see section 2)

12.7 Other adverse effects

N/A

13. Disposal considerations**13.1 Waste treatment methods***Waste treatment methods*

Disposal of wastes and residues must be in accordance with applicable waste legislation (185/2001 Coll. Act on Waste). Wastes can be disposed of only by authorized personnel.
It is not allowed pouring any amount of the substance into the sewerage network and waters. In case of contaminated rape meal provide the material to a specialized company for disposal.

14. Transport information

14.1 UN or ID number:	Not classified
14.2 Official (OSN) label for transport:	Not classified
14.3 Hazard class/ classes for transport:	Not classified
14.4 Packaging group:	Not classified
14.5 Environmental hazard:	Not classified
14.6 Special safety precautions for users:	Not classified
14.7 Marine transport based on IMO rules	N/A

15. Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture***Specific safety, health and environmental regulations/legislation for the substance.*

IATA – International Air Transport Association
RID – Regulations for international rail transport of dangerous goods.
ADR – European Agreement concerning international carriage of dangerous goods by road.
IMDG – International guideline for dangerous goods transport by ship
ČSN 650201 – Flammable liquids. Plants and warehouses.
Gov. Regulation no. 361/2007 Coll., laying down conditions for the protection of health of workers at work as amended.
Act no. 201/2012 Coll. on Air Protection, as amended.

Act no. 350/2011 Coll. on chemical substances and mixtures, and amending certain laws (Chemical Law)
Decree no. 93/2016 Coll. on waste catalogue
Act no. 111/1994 Coll. on road transport, as amended
Act no. 541/2020 Coll. on wastes, as amended
Act no. 254/2001 Coll. on waters, as amended
EC Regulation no. 1907/2006 Registration, evaluation, authorization and restriction of chemicals, establishing a European Chemicals Agency (REACH)
EC Regulation no. 453/2010. Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH - MSDS)
EC Regulation no. 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP)
EC Regulation no. 2020/878 Registration, evaluation, authorization and restriction of chemicals (REACH)
EC Regulation no. 2017/2100 Scientific criteria for the determination of the properties causing endocrine system disorder based on the European parliament and Council regulation no. 528/2012
EC Regulation no. 2018/605 Scientific criteria for the determination of the properties causing endocrine system disorder
European parliament and Council regulation (EU) no. 2016/425 Personal protective equipment

15.2 Chemical safety assessment

Chemical safety assessment (CSA)

A Chemical Safety Assessment is not required. The material is exempted of registration under REACH regulation.

16. Other information

ATTENTION: This safety data sheet reflects our present knowledge and describes the product as to its safety requirements. It does not assure any characteristics but gives recommendations for safe storage and handling measures. Receivers have to observe any legal regulation in their own responsibility.

SDS revision information

First edition of the document: Revision 0 from 25. 1. 2013 – document Edition version MSDS
 Second edition of the document: Revision 1 from 31. 5. 2015 – document Edition version MSDS
 Third edition of the document: Revision 2 from 26. 8. 2016 – document edition in MSDS version
 Fourth edition of the document: Revision 3 from 1.10.2021 – document Edition version MSDS

Changes made compared to the previous version

The following changes were made compared to the previous revision based on the EC regulation no. 2020/878 regarding registration, evaluation, authorization and restriction of chemicals (REACH):
 2.3: Information about properties causing endocrine system disorder and potential dust explosion added
 3.1: Information about specific concentration limit, multiplication factor, acute toxicity estimation and nanoform characteristics added
 8.1: Information about DNEL a PNEC values added
 8.2.2: Detailed specification regarding personal safety equipment usage
 9.1: Information about partition coefficient n-octanol/water and particle characterization added
 11.2: Information about properties causing endocrine system disorder with regards to potential effects on human health added
 12.6: New section added – Properties causing endocrine system disorder
 12.7: Numbering change of the former section 12.6
 14: New sections 14.1-14.7 – information provided not altered compared to the previous revision
 15.1: Current relevant legislation added – Act no. 541/2020 Coll., EC regulation no. 2020/878, EC regulation no. 2017/2100, EC regulation no. 2018/605 and European parliament and Council (EU) regulation no. 2016/425
 Minor sections and subsections names changes

Key/Abbreviations

CSA: Chemical Safety Assessment

PBT: Substance with Persistent, Bioaccumulative and Toxic properties.

vPvB: Substance with very Persistent and very Bioaccumulative properties.

Key References

None

Classification information for mixtures

Not relevant

List of relevant hazard statements and/or precautionary statements.

Not relevant. Described in Sections 2 to 15.

Advice on appropriate training for employees

Regular training in the scope safety handling, health and environment.