

SAFETY DATA SHEET

info@deffner-johann.de | +49 (0)9723 9350-0

Die in diesem Produktdatenblatt genannten Spezifikationen dienen nur zur Produktbeschreibung und beziehen sich auf den Zeitpunkt unmittelbar nach der Produktion bzw. Import des Produktes. Sie entsprechen den Angaben des Herstellers. Eine rechtsverbindliche Zusicherung bestimmter Eigenschaften oder der Eignung für einen bestimmten Einsatzzweck kann hieraus nicht abgeleitet werden. Durch unsachgemäßen Transport und / oder unsachgemäße Lagerung können sich Änderungen ergeben. Die Angaben in diesem Produktdatenblatt entbinden den Verarbeiter nicht von eigener Prüfung der Eigenschaften des Produktes und dessen Eignung für die vorgesehene Verwendung.

Ashland always solving	Page: 1
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

Conforms to EU Regulation 1907/2006/EC as amended. - SDSGHS_DE

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

1.1 Product identifier Trade name	:	Klucel™ M, ArtNr.: 2440 210
		™ Trademark, Ashland or its subsidiaries, registered in various countries
Substance name		HYDROXYPROPYLCELLULOSE
Substance No. EC-No.		618-388-0
CAS-No.		9004-64-2

1.2 Relevant identified uses of the substance or mixture and uses advised against Recommended use : Rheology modifier

1.3 Details of the supplier of the safety data sheet Deffner & Johann GmbH Mühläckerstr. 13 DE-97520 Röthlein Germany	1.4 Emergency telephone number +49-9723-9350-0, Mo-Fr 08:00-15:00, or contact your local emergency telephone number at 112
info@deffner-johann.de	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Ashland always solving	Page	: 2
SAFETY DATA SHEET	Revision Date: 11.08.20	17
	Print Date: 18.06.20	20
	SDS Number: R07028	31
	Version: 1	1.3

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Precautionary statements : **Prevention:**

Keep dust/air mixtures away from ignition sources.

2.3 Other hazards

Additional advice

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Description : Hydroxypropylcellulose

Chemical nature : organic

Hazardous components

No hazardous ingredients

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	:	No hazards which require special first aid measures.
If inhaled	:	If breathed in, move person into fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
In case of eye contact	:	Remove contact lenses.

Ashland always solving	Page: 3
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

Protect unharmed eye.

If swallowed : Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed Symptoms : No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	: No hazards which require special first aid measures.
-----------	--

SECTION 5: Firefighting measures

5.1	Extinguishing media		
	Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray Foam
5.2	Special hazards arising from t	he	substance or mixture
	Specific hazards during firefighting	:	Organic dusts at sufficient concentration can form explosive mixtures in air.
			Do not allow run-off from fire fighting to enter drains or water courses.
	Hazardous combustion products	:	carbon dioxide and carbon monoxide
5.3	Advice for firefighters		
	Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.
	Specific extinguishing methods	:	Product is compatible with standard fire-fighting agents.
	Further information	:	Standard procedure for chemical fires.

S Ashland always solving	Page: 4
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	: Avoid dust formation. Avoid breathing dust.
	Material can create slippery conditions.
	Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
	Comply with all applicable federal, state, and local regulations.

6.2 Environmental precautions

Environmental precautions : Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For further information see Section 8 and Section 13 of the safety data sheet.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Avoid dust formation. Ensure all equipment is electrically grounded and bonded before beginning transfer operations. The material can accumulate static charge and can therefore cause electrical ignition of flammable atmospheres. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. Maintain good housekeeping. Do not permit dust layers to accumulate, for example, on floors, ledges, and equipment, in order to avoid any potential for dust explosion hazards.
Advice on protection against fire and explosion	:	Take measures to prevent the build up of electrostatic charge. Provide appropriate exhaust ventilation at places where dust is formed.

Ashland always solving	Page: 5
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

Hygiene measures	:	Avoid breathing dust.
Dust explosion class	:	St1

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	: No smoking.
Advice on common storage	: No materials to be especially mentioned.
Storage class (TRGS 510)	: 11, Combustible Solids
Other data	: Keep in a dry place. No decomposition if stored and applied as directed.
7.3 Specific end use(s)	
Specific use(s)	: No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Provide appropriate exhaust ventilation at places where dust is formed. General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Eye protection	: Safety glasses
Hand protection Material	: butyl-rubber
Skin and body protection	: Wear as appropriate: Safety shoes

Ashland always solving	Page: 6
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

Respiratory protection

: No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance		granules, powder
Colour	:	off-white
Odour	:	odourless
Odour Threshold	:	No data available
рН	:	5,0 - 8,5 Concentration: 2 % (as aqueous solution)
Softening point	:	100 - 150 °C
Boiling point/boiling range	:	No data available
Flash point	:	Not applicable
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	30 g/m3
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	> 1 g/cm3
Bulk density	:	360 - 550 kg/m3

Ashland always solving	Page: 7
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

Solubility(ies) Water solubility	:	Insoluble > 45 °C
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Auto-ignition temperature	:	420 °C
Decomposition temperature	:	No data available
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Oxidizing properties	:	No data available
9.2 Other information		
Dust deflagration index (Kst)	:	< 200 m.b_/s
Dust explosion class	:	St1
Minimum ignition energy	:	> 3 mJ

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : Keep away from heat, flame, sparks and other ignition sources.

Ashland always solving	Page: 8
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

10.5 Incompatible materials

10.6 Hazardous decomposition products

Hazardous decomposition : No hazardous decomposition products are known. products

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of	:	Inhalation
exposure		Skin contact
		Eye Contact
		Ingestion

Acute toxicity

Not classified based on available information. Skin corrosion/irritation Not classified based on available information. Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury., Product dust may be irritating to eyes, skin and respiratory system.

Respiratory or skin sensitisation Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information. Germ cell mutagenicity Not classified based on available information. Carcinogenicity Not classified based on available information. **Reproductive toxicity** Not classified based on available information. STOT - single exposure Not classified based on available information. STOT - repeated exposure Not classified based on available information. Aspiration toxicity Not classified based on available information. **Product:** No aspiration toxicity classification

Further information <u>Product:</u>

Ashland always solving	Page: 9
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

Product:

Biodegradability

: Result: 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

Not relevant

12.6 Other adverse effects

Product:

Additional ecological : No data available information

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Contaminated packaging : Empty remaining contents.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number

Ashland always solving	Page: 10
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

ADN: Not dangerous goods ADR: Not dangerous goods INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods RID: Not dangerous goods

14.2 UN proper shipping name

ADN: Not dangerous goods ADR: Not dangerous goods INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods RID: Not dangerous goods

14.3 Transport hazard class(es)

ADN: Not dangerous goods ADR: Not dangerous goods INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods RID: Not dangerous goods

14.4 Packing group

ADN: Not dangerous goods ADR: Not dangerous goods INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods RID: Not dangerous goods

14.5 Environmental hazards

ADN: Not applicable ADR: Not applicable INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not applicable INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not applicable INTERNATIONAL MARITIME DANGEROUS GOODS: Not applicable RID: Not applicable

14.6 Special precautions for user

Ashland always solving	Page: 11
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Ship Type: Not applicable Hazard code(s): Not applicable Pollutant Category: Not applicable

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15: Regulatory information

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

	Regulation (EC) No 1005/2009 deplete the ozone layer) on	substances that	:	Not applicable
	Regulation (EC) No 850/2004 opollutants	on p	ersistent organic	:	Not applicable
	REACH - List of substances su (Annex XIV)	ubjeo	ct to authorisation	:	Not applicable
REACH - Restrictions on the manufacture, placing on : Not applicable the market and use of certain dangerous substances, preparations and articles (Annex XVII)				Not applicable	
	REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).				Not applicable
	Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the major-accident hazards involving dangerous substances. Not applicable				
	Water contaminating class (Germany)	: '	WGK 1 slightly water end	da	ngering
	TA Luft List (Germany)	:	Total dust, Not applicabl	е	
		:	Inorganic substances in	рс	wdered form, Not applicable

: Inorganic substances in vapour or gaseous form, Not applicable

control of

Ashland always solving	Page: 12
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

- : Organic Substances, Not applicable
- : Carcinogenic substances, Not applicable
- : Mutagenic, Not applicable
- : Toxic to reproduction, Not applicable

The components of this product are reported in the following inventories:

DSL :	All components of this product are on the Canadian DSL
AICS	On the inventory, or in compliance with the inventory
ENCS	On the inventory, or in compliance with the inventory
KECI	On the inventory, or in compliance with the inventory
PICCS	On the inventory, or in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory
TSCA	On TSCA Inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Further information Revision Date: 11.08.2017

S Ashland always solving	Page: 13
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

Full text of H-Statements

Other information

: The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (+31 10 497 5000).

Sources of key data used to compile the Safety Data Sheet

Ashland internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA). ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

Ashland always solving	Page: 14
SAFETY DATA SHEET	Revision Date: 11.08.2017
	Print Date: 18.06.2020
	SDS Number: R0702831
	Version: 1.3

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

GAM : Water Hazard Class for the Netherlands

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

ADNR: Regulation for the Carriage of Dangerous Substances on the Rhine

CLP : Classification, Labelling and Packaging

CSA : Chemical Safety Assessment

CSR : Chemical Safety Report

DNEL : Derived No Effect Level.

EINECS : European Inventory of Existing Commercial Chemical Substances.

ELINCS : European List of Notified Chemical Substances

GV: Exposure limits (DK)

PEC : Predicted Effect Concentration

PEL : Permissible Exposure Limits

PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

RID : Regulation Concerning the International Transport of Dangerous Goods by Rail

WGK : German Water Hazard Class