

SAFETY DATA SHEET

according to the Global Harmonized System and US regulation

AKUCCELL, ALL GRADES

Version 2

Revision Date 10/17/2016

Print Date 02/21/2017

US / Z8

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : AKUCCELL, ALL GRADES

Product Use Description : Specific use(s): Pharmaceutical, food, feed and healthcare applications

Company : AkzoNobel Chemicals AG
Performance Additives
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Switzerland

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2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	powder
Color	off-white
Odor	odorless
Hazard Summary	Aqueous solutions or powders produce extremely slippery surfaces. Risk of dust explosion.

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Potential Health Effects

Inhalation : Product dust may be irritating to respiratory system.

Skin : Product dust may be irritating to skin.

Eyes : Product dust may be irritating to eyes.

Ingestion : Not expected to be irritating.

Aggravated Medical : None known.

AKUCCELL, ALL GRADES

Version 2

Revision Date 10/17/2016

Print Date 02/21/2017

US / Z8

Condition

Symptoms of Overexposure : No symptoms known or expected.

Carcinogenicity:

IARC

: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

3. COMPOSITION/INFORMATION ON INGREDIENTS

No hazardous ingredients

4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- Inhalation : Remove to fresh air.
Keep patient warm and at rest.
Rinse nose and mouth with water.
- Skin contact : Remove contaminated clothing and shoes.
Rinse with water.
- Eye contact : Rinse with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
- Ingestion : Clean mouth with water and drink afterwards plenty of water.
Never give anything by mouth to an unconscious person.
- Notes to physician**
- Symptoms : No symptoms known or expected.
- Treatment : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during fire fighting / Specific hazards arising from the chemical : Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.
- Combustion products : Carbon oxides
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : Forms slippery/greasy surfaces with water.

See also Section 9. Physical and chemical properties: Safety data

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Avoid dust formation.
- Environmental precautions : No special environmental precautions required.
- Methods for cleaning up / : Use an electrically protected vacuum cleaner.

AKUCCELL, ALL GRADES

Version 2

Revision Date 10/17/2016

Print Date 02/21/2017

US / Z8

Methods for containment : Keep in suitable, closed containers for disposal.
Forms slippery/greasy surfaces with water.

Additional advice : For personal protection see section 8.

7. HANDLING AND STORAGE

Handling

Advice on safe handling : For personal protection see section 8.
Avoid creating dust.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Avoid spillage on floor as the product can become very slippery when wet.

Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.
No sparking tools should be used.

Dust explosion class : St1

Storage

Requirements for storage areas and containers : Keep in a dry place.
Store at room temperature in the original container.
Keep container tightly closed.

Advice on common storage : No special restrictions on storage with other products.

Other data : No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Ingredients	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
Dust		TWA	50 Million particles per cubic foot	2011-07-01	OSHA Z-3	total dust
	Further information	:	a: Based on impinger samples counted by light-field techniques. d: All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, which is the same as the Particulates Not Otherwise Regulated (PNOR) limit in Table Z-1. mppcf X 35.3 = million particles per cubic meter = particles per c.c			
Dust		TWA	15 mg/m ³	2011-07-01	OSHA Z-3	total dust
	Further information	:	d: All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, which is the same as the Particulates Not Otherwise Regulated (PNOR) limit in Table Z-1.			
Dust		TWA	5 mg/m ³	2011-07-01	OSHA Z-3	respirable fraction
	Further information	:	d: All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, which is the same as the Particulates Not Otherwise Regulated (PNOR) limit in Table Z-1.			

AKUCCELL, ALL GRADES

Version 2

Revision Date 10/17/2016

Print Date 02/21/2017

US / Z8

Dust		TWA	15 Million particles per cubic foot	2011-07-01	OSHA Z-3	respirable fraction
	Further information	:	a: Based on impinger samples counted by light-field techniques. d: All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, which is the same as the Particulates Not Otherwise Regulated (PNOR) limit in Table Z-1. mppcf X 35.3 = million particles per cubic meter = particles per c.c			

- ACGIH: American Conference of Governmental Industrial Hygienists
- BEI: Biological Exposure Index
- MAC: Maximum Allowable Concentration
- NIOSH: National Institute for Occupational Safety and Health
- OEL: OEL: Occupational exposure limit.
- STEL: Short term exposure limit
- TWA: Time Weighted Average

Engineering measures

Provide appropriate exhaust ventilation at places where dust is formed.

Personal protective equipment

- Eye/face protection : Safety glasses
- Hand protection : Glove material: For prolonged or repeated contact use protective gloves.
: Glove material: Protective gloves complying with EN 374.
- Respiratory protection : No personal respiratory protective equipment normally required.
In the case of dust, vapor or aerosol formation use respirator with an approved filter.
Half mask with a particle filter P2 (EN 143)
- Hygiene measures : General industrial hygiene practice.

Environmental exposure controls

General advice : No special environmental precautions required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

- Form : powder
- Color : off-white
- Odor : odorless
- Odor Threshold : No data available

Safety data

- pH : 6 - 8.5 at 1 % solution

AKUCCELL, ALL GRADES

Version 2

Revision Date 10/17/2016

Print Date 02/21/2017

US / Z8

Melting point/range	: No data available
Boiling point/boiling range	: Not applicable
Flash point	: Not applicable
Ignition temperature	: 360 °C Method: EN 50281-2-1
Evaporation rate	: Not applicable
Flammability (solid, gas)	: Combustible Solids
Flammability (liquids)	: Not applicable
Lower explosion limit	: 60 g/m ³
Upper explosion limit	: No data available
Vapor pressure	: Not applicable
Relative vapor density	: Not applicable
Density	: 1,500 kg/m ³
Relative density	: 1.5
Bulk density	: 200 - 1,000 kg/m ³
Water solubility	: Soluble, gel formation.
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: 170 °C Method: EN 15188
Burning number	: 5
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Dust explosion class	: St1
Dust deflagration index (Kst)	: < 200 m.b./s
Explosive properties	: Not explosive
Minimum ignition energy	: > 2,300 mJ Method: with induction
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

AKUCCELL, ALL GRADES

Version 2

Revision Date 10/17/2016

Print Date 02/21/2017

US / Z8

This material safety datasheet only contains information relating to safety and does not replace any product information or product specification.

10. STABILITY AND REACTIVITY

Conditions to avoid	: Keep away from open flames, hot surfaces and sources of ignition.
Materials to avoid	: None known.
Hazardous decomposition products	: No hazardous decomposition products are known.
Thermal decomposition	: No data available
Reactivity	: Stable under normal conditions.
Chemical stability	: Stable under recommended storage conditions.
Hazardous reactions	: Dust may form explosive mixture in air.

11. TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION:

Toxicology Assessment

Further information : No further data available.

Test result

Acute oral toxicity : LD50: > 5,000 mg/kg
Species: Rat
Read-across (Analogy)

Carcinogenicity:

IARC : No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP : No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

12. ECOLOGICAL INFORMATION

PRODUCT INFORMATION:

Ecotoxicology Assessment

Additional ecological information : None known.

AKUCCELL, ALL GRADES

Version 2

Revision Date 10/17/2016

Print Date 02/21/2017

US / Z8

Test result

Ecotoxicity effects

Toxicity to fish : LC50: > 100 mg/l
Exposure time: 96 h
Species: Danio rerio (zebra fish)
Read-across (Analogy)

Elimination information (persistence and degradability)

Bioaccumulation : Bioaccumulation is unlikely.
Mobility : Adsorption to the solid soil particles is not expected.
Biodegradability : Result: Inherently biodegradable.

Further information on ecology

Biochemical Oxygen Demand (BOD) : No data available

Hazardous to the ozone layer

Regulation : 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

13. DISPOSAL CONSIDERATIONS

Contaminated packaging : Empty remaining contents.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

International Regulations

ADR

Not regulated as a dangerous good

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

AKUCCELL, ALL GRADES

Version 2

Revision Date 10/17/2016

Print Date 02/21/2017

US / Z8

Further information for transport

Not classified as dangerous in the meaning of transport regulations.

Domestic regulation

49 CFR

Not regulated as a dangerous good

TDG

Not regulated as a dangerous good

NOM-002-SCT

Not regulated as a dangerous good

15. REGULATORY INFORMATION

Notification status

DSL	: YES. All components of this product are on the Canadian DSL
AICS	: YES. On the inventory, or in compliance with the inventory
NZIoC	: YES. On the inventory, or in compliance with the inventory
ENCS	: YES. On the inventory, or in compliance with the inventory
ISHL	: YES. On the inventory, or in compliance with the inventory
KECI	: YES. On the inventory, or in compliance with the inventory
PICCS	: YES. On the inventory, or in compliance with the inventory
IECSC	: YES. On the inventory, or in compliance with the inventory
TCSI	: YES. On the inventory, or in compliance with the inventory
TSCA	: YES. All chemical substances in this product are either listed on the TSCA Inventory or in compliance with a TSCA Inventory exemption.

For explanation of abbreviations, see section 16.

TSCA list

TSCA 5(a)(2)	: No substances are subject to a Significant New Use Rule.
TSCA 12(b)	: No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals subject to disclosure and listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

AKUCCELL, ALL GRADES

Version 2

Revision Date 10/17/2016

Print Date 02/21/2017

US / Z8

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

Sodium carboxymethyl cellulose 9004-32-4 99.5 - 100 %

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Sodium carboxymethyl cellulose 9004-32-4

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECl - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No

AKUCCELL, ALL GRADES

Version 2

Revision Date 10/17/2016

Print Date 02/21/2017

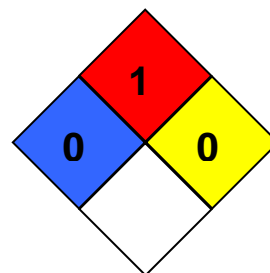
US / Z8

1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Further information

HMIS Classification : Health Hazard: 0
Flammability: 1
Physical hazards: 0

NFPA Classification : Health Hazard: 0
Fire Hazard: 1
Reactivity Hazard: 0



Notification status explanation

REACH	1907/2006 (EU)
DSL	Canadian Domestic Substances List (DSL)
AICS	Australia Inventory of Chemical Substances (AICS)
NZIoC	New Zealand. Inventory of Chemical Substances
ENCS	Japan. ENCS - Existing and New Chemical Substances Inventory
ISHL	Japan. ISHL - Inventory of Chemical Substances
KECI	Korea. Korean Existing Chemicals Inventory (KECI)
PICCS	Philippines Inventory of Chemicals and Chemical Substances (PICCS)
IECSC	China. Inventory of Existing Chemical Substances in China (IECSC)
TCSI	Taiwan Chemical Substance Inventory
TSCA	United States TSCA Inventory

Further information

Revision Date 10/17/2016

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AKUCCELL, ALL GRADES

Version 2

Revision Date 10/17/2016

Print Date 02/21/2017

US / Z8

The information in this material safety data sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The user must determine the appropriate measures that need to be implemented for the use and handling of this product in the context of the user's operations and use of this product. The information contained herein supersedes all previously issued bulletins on the subject matter covered. If the date on this document is more than three years old, call to make certain that this sheet is current. No warranty is made as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. User must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. Nothing contained herein shall be construed as granting or extending any license under any patent.

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.