

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Ammonium dichromate

Creation date 30th August 2019 Revision date 12th March 2024

Version 3.0

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

..1. Product identifier Ammonium dichromate

Substance / mixture substance

Chemical name ammonium dichromate

 CAS number
 7789-09-5

 Index number
 024-003-00-1

 EC (EINECS) number
 232-143-1

Registration number 01-2119661563-36-XXXX

Other substance name

Ammonium dichromate, Ammonium bichromate

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

Substance's intended use

Laboratory chemical substances. Scientific research and development.

Substance uses advised against

The product should not be used in ways other than those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Supplier

Name or trade name Ing. Petr Švec - PENTA s.r.o.
Address Radiová 1122/1, Praha 10, 102 00

Czech Republic

Identification number (CRN)02096013VAT Reg NoCZ02096013Phone+420 226 060 681E-mailinfo@pentachemicals.euWeb addresswww.pentachemicals.eu

Competent person responsible for the safety data sheet

Name Ing. Petr Švec - PENTA s.r.o. E-mail info@pentachemicals.eu

1.4. Emergency telephone number

European emergency number: 112 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the substance in accordance with Regulation (EC) No 1272/2008

The substance is classified as dangerous.

Ox. Sol. 2, H272 Acute Tox. 3, H301

Acute Tox. 4, H312 Skin Corr. 1B, H314

Skin Sens. 1, H317

Eye Dam. 1, H318

Acute Tox. 2, H330

Resp. Sens. 1, H334

Muta. 1B, H340

Carc. 1B, H350

Repr. 1B, H360FD STOT RE 1, H372

Aquatic Acute 1, H400

Aquatic Chronic 1, H410



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Most serious adverse physico-chemical effects

May intensify fire; oxidiser.

Most serious adverse effects on human health and the environment

Toxic if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause genetic defects. May cause cancer. May damage fertility. May damage the unborn child. Causes damage to organs through prolonged or repeated exposure. May cause respiratory irritation. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram











Signal word

Danger

Dangerous substance

ammonium dichromate

(Index: 024-003-00-1; CAS: 7789-09-5)

Hazard statements

H272 May intensify fire; oxidiser.

H301 Toxic if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H330 Fatal if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H340 May cause genetic defects.

H350 May cause cancer.

H360FD May damage fertility. May damage the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.

P220 Keep away from clothing and other combustible materials.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Supplemental information

Restricted to professional users.

2.3. Other hazards

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended. Dust may form explosive mixture with air.



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SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization

The substance specified below.

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Indov. 024 002 00 1	substance main component	> 00	Ov. Cal. 2. H272	1 2
Index: 024-003-00-1 CAS: 7789-09-5 EC: 232-143-1 Registration number: 01-2119661563-36- XXXX	ammonium dichromate	>99	Ox. Sol. 2, H272 Acute Tox. 3, H301 Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Acute Tox. 2, H330 Resp. Sens. 1, H334 Muta. 1B, H340 Carc. 1B, H350 Repr. 1B, H360FD STOT RE 1, H372 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) Specific concentration limit: Skin Sens. 1, H317: C ≥ 0.2 % STOT SE 3, H335: C ≥ 5 % Resp. Sens. 1, H334: C ≥ 0.2 %	1, 2, 3, 4, 5

Notes

- 1 Note G: This substance may be marketed in an explosive form in which case it must be evaluated using the appropriate test methods. The classification and labelling provided shall reflect the explosive properties.
- 2 Note 3: The concentration stated is the percentage by weight of chromate ions dissolved in water calculated with reference to the total weight of the mixture.
- 3 Substance of very high concern SVHC.
- 4 The substance is included in Annex XIV of the REACH Regulation
- 5 The use of the substance is restricted by Annex XVII of REACH Regulation

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Take care of your own safety, do not let the affected person walk! Terminate the exposure immediately; move the affected person to fresh air. Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

If on skin

Remove contaminated clothes. Take off any rings, watches, bracelets before or during washing if worn in the contaminated areas of the skin. Depending on the situation, call the medical rescue service and always ensure medical treatment. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers. Rinse skin with water/shower. Rinse cautiously with water for several minutes.



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If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

If swallowed

INDUCE VOMITING! Vomiting should be induced in the person only if conscious, within 1 hour from ingestion. If in doubt whether vomiting should be induced, contact the Toxicological Information Centre and give information about the substances or composition of the product as provided on the original packaging or in the safety data sheet of the product. FOLLOWING INGESTION OF TOXIC OR HIGHLY TOXIC SUBSTANCES, GIVE 10-20 CRUSHED TABLETS OF ACTIVATED CARBON, MIXED IN WATER, WITHIN NO LATER THAN 5 MINUTES - irrespective of whether vomiting could be induced. Call medical rescue service.

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

If inhaled

Inhaling dust can cause corrosion of the breathing system. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

If on skin

Causes severe skin burns. May cause an allergic skin reaction.

If in eyes

Causes serious eye damage.

If swallowed

Corrosion of the digestion system can occur.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. The substance is flammable. May intensify fire; oxidiser. Remove all ignition sources. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale dust. Prevent contact with skin and eyes.

6.2. Environmental precautions

Do not allow to enter drains. Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Place the product mechanically in an appropriate manner. Dispose of the collected material according to the instructions in the section 13.

6.4. Reference to other sections

See the Section 7, 8 and 13.



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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. Use of antistatic clothes and footwear is recommended. Do not inhale dust. Prevent contact with skin and eyes. No smoking. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not eat, drink or smoke when using this product. Wash hands and exposed parts of the body thoroughly after handling. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Take any precaution to avoid mixing with combustibles. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight. Store locked up. Keep container tightly closed.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

none

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

Skin protection

When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly. Hand protection: Protective gloves resistant to the product (nitrile rubber).

Respiratory protection

Use insulating breathing apparatus when the exposition limits of the substances are exceeded or at the place with insufficient ventilation. Respirator. Mask with dust filter.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state solid Colour orange

Odour without fragrance

Melting point/freezing point 180 °C

Boiling point or initial boiling point and boiling range data not available Flammability data not available Lower and upper explosion limit data not available Flash point data not available Auto-ignition temperature data not available Decomposition temperature data not available pH 3.45 (undiluted)



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Kinematic viscosity

Solubility in water

360 g/l 20°C

Partition coefficient n-octanol/water (log value)

Vapour pressure

Density and/or relative density

Relative vapour density

Particle characteristics

data not available

data not available

data not available

data not available

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

The substance is oxidizing.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

No toxicological data is available for the substance.

Acute toxicity

Toxic if swallowed. Harmful in contact with skin. Fatal if inhaled.

ammonium dichromate					
Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD50	53.75 mg/kg		Rat (Rattus norvegicus)	
Dermal	LD ₅₀	1640 mg/kg		Rabbit	
Inhalation	LC50	0.156 mg/l	4 hours	Rat (Rattus norvegicus)	

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes severe skin burns and eye damage.

Respiratory or skin sensitisation

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.



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Germ cell mutagenicity

May cause genetic defects.

Carcinogenicity

May cause cancer.

Reproductive toxicity

May damage fertility. May damage the unborn child.

Toxicity for specific target organ - single exposure

May cause respiratory irritation.

Toxicity for specific target organ - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. Based on available data the classification criteria are not met.

11.2. Information on other hazards

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Acute toxicity

ammonium dichromate					
Parameter	Value	Exposure time	Species	Environment	
LC50	110 mg/l	96 hours	Fish (Oncorhynchus mykiss)		
EC50	0.32 mg/l	48 hours	Daphnia (Daphnia magna)		
	5 mg/l	48 hours	Algae (Selenastrum capricornutum)		

12.2. Persistence and degradability

No data available for the substance.

12.3. Bioaccumulative potential

No data available for the substance.

12.4. Mobility in soil

No data available for the substance.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

12.7. Other adverse effects



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Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number or ID number

UN 1439

14.2. UN proper shipping name

AMMONIUM DICHROMATE

Transport hazard class(es)

Oxidazing substances

14.4. Packing group

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

not available

14.7. Maritime transport in bulk according to IMO instruments

not relevant

Additional information

Hazard identification No.

IIN number

Safety signs

Classification code

50 1439

02

5.1+hazardous for the environment





Tunnel restriction code (E)

Air transport - ICAO/IATA

558 Packaging instructions passenger Cargo packaging instructions 562

Marine transport - IMDG

EmS (emergency plan) F-H, S-Q



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SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended

ammonium di	rromate
Restriction	Conditions of restriction
28	Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30: 1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or,
	— in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than:
	— either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or,
	— the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.
	Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows:
	"Restricted to professional users".
	2. By way of derogation, paragraph 1 shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: — motor fuels which are covered by Directive 98/70/EC,
	 mineral oil products intended for use as fuel in mobile or fixed combustion plants, fuels sold in closed systems (e.g. liquid gas bottles);
	(d) artists' paints covered by Regulation (EC) No 1272/2008; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date.
	(f) devices covered by Regulation (EU) 2017/745.



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Restriction	Conditions of restriction
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	Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows: "Restricted to professional users".
	2. By way of derogation, paragraph 1 shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: — motor fuels which are covered by Directive 98/70/EC, — mineral oil products intended for use as fuel in mobile or fixed combustion plants, — fuels sold in closed systems (e.g. liquid gas bottles); (d) artists' paints covered by Regulation (EC) No 1272/2008; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date. (f) devices covered by Regulation (EU) 2017/745.



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Restriction	Conditions of restriction
30	Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30: 1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or, — in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: — either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, — the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.
	Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows:
	"Restricted to professional users".
	 2. By way of derogation, paragraph 1 shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: — motor fuels which are covered for use as fuel in mebile or fixed combustion plants.
	 mineral oil products intended for use as fuel in mobile or fixed combustion plants, fuels sold in closed systems (e.g. liquid gas bottles); (d) artists' paints covered by Regulation (EC) No 1272/2008; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11 column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date. (f) devices covered by Regulation (EU) 2017/745.



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Restriction	Conditions of restriction
47	1. Cement and cement-containing mixtures shall not be placed on the market, or used, if they contain, when hydrated, more than 2 mg/kg (0,0002 %) soluble chromium VI of the total dry weight of the cement.
	2. If reducing agents are used, then without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of cement or cement-containing mixtures is visibly, legibly and indelibly marked with information on the packing date, as well as on the storage conditions and the storage period appropriate to maintaining the activity of the reducing agent and to keeping the content of soluble chromium VI below the limit indicated in paragraph 1.
	3. By way of derogation, paragraphs 1 and 2 shall not apply to the placing on the market for, and use in, controlled closed and totally automated processes in which cement and cement-containing mixtures are handled solely by machines and in which there is no possibility of contact with the skin.
	4. The standard adopted by the European Committee for Standardization (CEN) for testing the water-soluble chromium (VI) content of cement and cement-containing mixtures shall be used as the test method for demonstrating conformity with paragraph 1.
	5. Leather articles coming into contact with the skin shall not be placed on the market where they contain chromium VI in concentrations equal to or greater than 3 mg/kg (0,0003 % by weight) of the total dry weight of the leather.
	6. Articles containing leather parts coming into contact with the skin shall not be placed on the market where any of those leather parts contains chromium VI in concentrations equal to or greater than 3 mg/kg (0,0003 % by weight) of the total dry weight of that leather part.
	7. Paragraphs 5 and 6 shall not apply to the placing on the market of second-hand articles which were in end-use in the Union before 1 May 2015.



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Restriction	Conditions of restriction
65	1. Shall not be placed on the market, or used, in cellulose insulation mixtures or cellulose insulation articles after 14 July 2018 unless the emission of ammonia from those mixtures or articles results in a concentration of less than 3 ppm by volume (2,12 mg/m3) under the test conditions specified in paragraph 4.
	A supplier of a cellulose insulation mixture containing inorganic ammonium salts shall inform the recipient or consumer of the maximum permissible loading rate of the cellulose insulation mixture, expressed in thickness and density.
	A downstream user of a cellulose insulation mixture containing inorganic ammonium salts shall ensure that the maximum permissible loading rate communicated by the supplier is not exceeded.
	2. By way of derogation, paragraph 1 shall not apply to placing on the market of cellulose insulation mixtures intended to be used solely for the production of cellulose insulation articles, or to the use of those mixtures in the production of cellulose insulation articles.
	3. In the case of a Member State that, on 14 July 2016, has national provisional measures in place that have been authorised by the Commission pursuant to Article 129(2)(a), the provisions of paragraphs 1 and 2 shall apply from that date.
	 4. Compliance with the emission limit specified in the first subparagraph of paragraph 1 shall be demonstrated in accordance with Technical Specification CEN/TS 16516, adapted as follows: (a) the duration of the test shall be at least 14 days instead of 28 days; (b) the ammonia gas emission shall be measured at least once per day throughout the test; (c) the emission limit shall not be reached or exceeded in any measurement taken during the test; (d) the relative humidity shall be 90 % instead of 50 %; (e) an appropriate method to measure the ammonia gas emission shall be used; (f) the loading rate, expressed in thickness and density, shall be recorded during the sampling of the cellulose insulation mixtures or articles to be tested.



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Restriction	Conditions of restriction
72	1. Shall not be placed on the market after 1 November 2020 in any of the following: (a) clothing or related accessories;
	(b) textiles other than clothing which, under normal or reasonably foreseeable conditions of use,
	come into contact with human skin to an extent similar to clothing;
	(c) footwear; if the clothing, related accessory, textile other than clothing or footwear is for use by consumers and
	the substance is present in a concentration, measured in homogeneous material, equal to or greater
	than that specified for that substance in Appendix 12.
	2. By way of derogation, in relation to the placing on the market of formaldehyde [CAS No 50-00-0]
	in jackets, coats or upholstery, the relevant concentration for the purposes of paragraph 1 shall be
	300 mg/kg during the period between 1 November 2020 and 1 November 2023. The concentration specified in Appendix 12 shall apply thereafter.
	3. Paragraph 1 shall not apply to:
	(a) clothing, related accessories or footwear, or parts of clothing, related accessories or footwear,
	made exclusively of natural leather, fur or hide; (b) non-textile fasteners and non-textile decorative attachments;
	(c) second-hand clothing, related accessories, textiles other than clothing or footwear
	(d) wall-to-wall carpets and textile floor coverings for indoor use, rugs and runners.
	4. Paragraph 1 shall not apply to clothing, related accessories, textiles other than clothing, or footwear within the scope of Regulation (EU) 2016/425 of the European Parliament and of the
	Council (*) or Regulation (EU) 2017/745 of the European Parliament and of the Council (**).
	5. Paragraph 1(b) shall not apply to disposable textiles. 'Disposable textiles' means textiles that are designed to be used only once or for a limited time and are not intended for subsequent use for the
	same or a similar purpose.
	6. Paragraphs 1 and 2 shall apply without prejudice to the application of any stricter restrictions set
	out in this Annex or in other applicable Union legislation.
	7. The Commission shall review the exemption in paragraph 3(d) and, if appropriate, modify that
	point accordingly. (*) Regulation (EU) 2016/425 of the European Parliament and of the Council of of 9 March 2016 on
	personal protective equipment and repealing Council Directive 89/686/EEC (OJ L 81, 31.3.2016, p.
	51).
	(**) Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC)
	No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC (OJ L 117, 5.5.2017, p.
	1).

15.2. Chemical safety assessment

No chemical safety assessment has been performed for this substance.



SAFETY DATA SHEET							
according to Regulation (EC) No 1907/2006 (REACH) as amended							
Ammonium dichromate							
Creation date	30th August 2019						
Revision date	12th March 2024	Version	3.0				

No chemical safety assessment has been performed for this substance.



SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Ammonium dichromate

Creation date 30th August 2019 Revision date 12th March 2024

Version 3.0

No chemical safety assessment has been performed for this substance.

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H272	May intensify fire; oxidiser.	
72/2	May intensity fire, oxidiser.	

H301 Toxic if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation. H340 May cause genetic defects.

H350 May cause cancer.

H360FD May damage fertility. May damage the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet

P201 Obtain special instructions before use.

P220 Keep away from clothing and other combustible materials.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR European agreement concerning the international carriage of dangerous goods by

road

BCF Bioconcentration Factor
CAS Chemical Abstracts Service

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of

substance and mixtures

EC Identification code for each substance listed in EINECS

EC50 Concentration of a substance when it is affected 50% of the population EINECS European Inventory of Existing Commercial Chemical Substances

EmS Emergency plan EU European Union

EuPCS European Product Categorisation System



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IATA International Air Transport Association

IBC International Code For The Construction And Equipment of Ships Carrying

Dangerous Chemicals

ICAO International Civil Aviation Organization **IMDG** International Maritime Dangerous Goods IMO International Maritime Organization

INCI International Nomenclature of Cosmetic Ingredients ISO International Organization for Standardization **IUPAC** International Union of Pure and Applied Chemistry

LC50 Lethal concentration of a substance in which it can be expected death of 50% of the

population

Lethal dose of a substance in which it can be expected death of 50% of the LD₅₀

population

log Kow Octanol-water partition coefficient OEL Occupational Exposure Limits

PBT Persistent, Bioaccumulative and Toxic

ppm Parts per million

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Agreement on the transport of dangerous goods by rail

UN Four-figure identification number of the substance or article taken from the UN

Model Regulations

UVCB Substances of unknown or variable composition, complex reaction products or

biological materials

VOC Volatile organic compounds

vPvB Very Persistent and very Bioaccumulative

Acute Tox. Acute toxicity

Aquatic Acute Hazardous to the aquatic environment

Aquatic Chronic Hazardous to the aquatic environment (chronic)

Carc. Carcinogenicity Eye Dam. Serious eye damage Muta. Germ cell mutagenicity Ox. Sol. Oxidising solid Repr. Reproductive toxicity Resp. Sens. Respiratory sensitization

Skin Corr. Skin corrosion Skin Sens. Skin sensitization

STOT RE Specific target organ toxicity - repeated exposure STOT SE Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 3.0 replaces the SDS version from 30 November 2022. Changes were made in sections 1, 2, 11, 12, 15 and 16.

More information

Classification procedure - calculation method.



SAFETY DATA SHEET						
according to Regulation (EC) No 1907/2006 (REACH) as amended						
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Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.