

The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

K3 W

Creation date 22nd October 2003

Revision date 22nd December 2022 Version

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

1.1. **Product identifier** K3 W Substance / mixture mixture

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

Mixture's intended use

Limescale remover

The use descriptors

IS Use at industrial sites

PW Widespread use by professional workers

Mixture 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 NOVATO

Address Uralská 770/6, Praha, 160 00

Czech Republic

Identification number (CRN) 62910370 VAT Reg No CZ62910370 Phone +420 233 339 688 E-mail

petr.johanides@novato.cz Web address www.novato.cz

Competent person responsible for the safety data sheet

ABITEC Name

info@abitec.cz F-mail

1.4. **Emergency telephone number**

European emergency number: 112

SECTION 2: Hazards identification

Classification of the substance or mixture 2 1

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

The mixture is classified as dangerous.

Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412

Most serious adverse physico-chemical effects

The mixture is acidic. Danger of violent exothermic reactions in contact with bases. Avoid contact with policies and oxidizing agents. The mixture is not flammable. Thermal decomposition at high temperatures may cause release hazardous decomposition products. Do not inhale decomposition products.

Most serious adverse effects on human health and the environment

dness, conjunctivitis to severe irritation) and skin

(redness, burning, itching). Inhalation of the dust may irritate the mucous membranes. When ingested they may experience irritation of the digestive tract, abdominal pain, nausea. Ensure against confusion with food. The mixture is classified as harmful to the environment. Leakage of a large amount of the mixture into the environment

the environment can affect the pH of the aquatic environment. Follow the instructions for use to avoid risks for humans and the environment. Avoid release to soil, ground or surface water or sewers.

Dispose of the empty container with the remains of the mixture as hazardous waste.

The full wording of the classification and H phrases is given in Sect. 16 of this safety data sheet.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

K3 W

Creation date 22nd October 2003

Revision date 22nd December 2022 Version 5

2.2. Label elements

Hazard pictogram



Signal word

Warning

Hazard statements

H315 Causes skin irritation. H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection.

P302+P352 IF ON SKIN: Wash with plenty of water and soap.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

Neither the mixture nor its components meet the criteria for persistent, bioaccumulative and toxic or highly persistent and highly bioaccumulative substances in accordance with Annex XIII, nor have they been included in the list drawn up in accordance with Article 59, paragraph 1, due to the content of endocrine disruptors, nor has it been determined as a substance with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

in the working characterist					
Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note	
Index: 016-026-00-0 CAS: 5329-14-6 EC: 226-218-8	sulphamidic acid		Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412 Specific concentration limit: Skin Irrit. 2, H315: $C \ge 10 \%$ Eye Irrit. 2, H319: $C \ge 10 \%$		

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

In the event of health problems or in case of doubt, consult a doctor and provide him with information from this safety data sheet. In case of life-threatening conditions, perform resuscitation. An unconscious person place in a stable position and do not give anything by mouth. Avoid catching cold. Do not induce vomiting. At by spontaneous vomiting, prevent inhalation of vomitus.

If inhaled

Interrupt the exposure, rinse the oral cavity with water, breathe fresh air. They appeared respiratory tract irritation, seek medical attention. If necessary (respiratory arrest or irregular breathing) perform artificial respiration.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) .

K3 W

Creation date	22nd October 2003		
Revision date	22nd December 2022	Version	5

If on skin

Wash thoroughly with soap and water. Treat with a regenerating cream. Remove clothing if contaminated clothing. If symptoms of irritation appear and persist, seek medical attention.

If the victim wears contact lenses, remove them. With wide open eyes, rinse from the inner corner eyes towards the outside with a large amount of clean lukewarm water, especially the space under the lids. Flushing for at least 15 min., seek medical attention.

If swallowed

Do not induce vomiting, rinse mouth with water. Drink a glass of cold water (if the affected person does not have pain or spasms), give 1-2 tablets of activated charcoal. Seek medical treatment and present this Safety Data Sheet.

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

If inhaled

Inhalation of the dust may irritate the mucous membranes.

If on skin

The mixture is strongly acidic. It irritates the skin (redness, burning, itching).

If in eves

The mixture is strongly acidic. Irritating to the eyes (watering, burning, redness, conjunctivitis to severe irritation).

If swallowed

When ingested

they may experience irritation of the digestive tract, abdominal pain, nausea.

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

In the case of the usual use of the mixture and following the instructions in the instructions for use, immediate medical assistance is not required. Special treatment is required if symptoms of a certain degree occur, according to the data in sections 4.1 and 4.2; is symptomatic.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

The mixture is not flammable, match the fire extinguishers to the surrounding fire (multipurpose powders, CO2, foam.

water mist).

Unsuitable extinguishing media

Special hazards arising from the substance or mixture 5.2.

Thermal decomposition at high temperatures can produce dangerous decomposition products (COx, SOx, etc.). Do not inhale decomposition products.

5.3. Advice for firefighters

Adapt protective equipment to the nature of the fire (self-contained breathing apparatus, emergency suit). Move mixture tanks out of reach of fire if you can do so without risk. Combustion residues even the water after the intervention should be disposed of as hazardous waste.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Prevent the entry of unauthorized persons, secure and isolate the escape area. Ensure adequate ventilation, do not inhale the dust. Minimize the dustiness of the mixture. Avoid contact with skin and eyes - use personal protective equipment. Avoid contact with heat sources.

6.2. **Environmental precautions**

Secure the area of the leak, catch the leaking mixture. Prevent leakage into drains, soil, surface and groundwater. In the event of a large liquid leak, monitor the NPK concentration or TLV and inform the relevant state authorities and the manager of the stream or sewer.

6.3. Methods and material for containment and cleaning up

Pick up mechanically. Observe the dust limit. Place in a sealable waste container and dispose of as hazardous waste or forward for further processing. Wash the contaminated area with water.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

K3 W

Creation date 22nd October 2003

Revision date 22nd December 2022 Version 5

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure sufficient ventilation of the work area. Avoid exposure to heat sources. Protect your eyes and skin, do not inhale dust, use personal protective equipment according to sec. 8. Prevent confusion with groceries. Secure the container against spillage. Keep the work area clean and clear. Working the area should be equipped with a source of drinking water to provide first aid.

Observe the applicable health and safety legislation. Follow the principles of work hygiene with chemicals, do not eat, drink or smoke while working. Wash your hands with warm water before breaks, meals and after work soapy water.

7.2. Conditions for safe storage, including any incompatibilities

Store tightly closed in the original packaging in a clean, dry and well-ventilated place.

Protect from atmospheric moisture. The warehouse should be equipped with a source of drinking water. Store separately from

strong bases and oxidizing agents. Store away from food, drink and feed. Follow the instructions given on the label.

Content	Packaging type	Material of package
10 kg	bucket	
30 kg	bucket	

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture does not contain any constituents of national exposure limits specified in Annex 2, Government Decree 361/2007 Coll., As amended or European Union for Work Environment.

8.2. Exposure controls

Ensure sufficient ventilation of the work area. In case of increased dustiness, use a suitable one protection of the respiratory system. Avoid contact with skin and eyes, do not inhale the sprayed mixture. Comply hygienic measures for working with chemicals. The work area should be equipped with sources of drinking water. Do not eat, drink or smoke while working. Wash your hands with lukewarm water before breaks, meals and after work

with soap.

Adapt personal protective equipment to the nature of the work.

Eye/face protection

Dustproof safety glasses.

Skin protection

Protective work clothing or footwear. Wash the affected skin, treat it with a protective cream.

Remove contaminated clothing and wash before re-use. Protective gloves (material e.g. nitrile 0.11 mm, penetration time > 480 min.). Be careful when choosing

manufacturer's recommendations, the material must be impermeable and resistant to the components of the mixture. Before the first

test for use at a specific workplace. Replace damaged gloves.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) .

K3 W

Creation date 22nd October 2003

Revision date 22nd December 2022 Version 5

Respiratory protection

In case of increased dust, use a respirator or mask with dust filter. At

long-term exposure or in the event of an accident, use a self-contained breathing apparatus.

Heating the mixture releases dangerous gases. Avoid heating the mixture and exposure elevated temperatures.

Environmental exposure controls

Observe the usual environmental protection measures. Prevent leakage into drains, soil, waterways and environmental components.

Ensure compliance with governmental regulation 361/2007 Coll., Laying down the conditions for the protection of health at work, as amended, and to fulfill the obligations contained therein.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state

Colour

Odour

Melting point/freezing point

Boiling point or initial boiling point and boiling range

Flammability

Lower and upper explosion limit

Flash point

Auto-ignition temperature Decomposition temperature

рН

Kinematic viscosity Solubility in water

Partition coefficient n-octanol/water (log value)

Vapour pressure

Density and/or relative density Relative vapour density Particle characteristics

9.2. Other information

Density and/or relative density (at 20 °C): 2130 kg/m3

solid

Yellowish to white characteristic data not available

data not available

The product is non-flammable.

data not available

data not available

data not available

data not available 1.2 (1% solution)

data not available

soluble (approx. 210 g/l at 20 °C, 470 g/l at 80 °C)

data not available 0.0078 hPa at 20 °C data not available data not available data not available

SECTION 10: Stability and reactivity

10.1. Reactivity

If the recommended method of use is followed, there is no risk of dangerous reactions. The mixture is strongly acidic, danger of exothermic reaction in contact with bases. The mixture must be added to the water, not the other way around, slowly and with constant stirring.

10.2. Chemical stability

The mixture is stable under normal environmental conditions, storage and handling.

10.3. Possibility of hazardous reactions

In contact with bases, a dangerous exothermic reaction, heat generation and splashing may occur reaction mixtures. Hazardous gases may be released by reaction with oxidizing agents. The mixture reacts with metals, halogens and water.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

K3 W

Creation date 22nd October 2003

Revision date 22nd December 2022 Version 5

10.4. Conditions to avoid

Very high temperatures, frost, air humidity, contact with incompatible substances.

10.5. Incompatible materials

Strong bases, oxidizing agents, metals, halogens, water.

10.6. Hazardous decomposition products

Under normal conditions, the mixture does not decompose. They could by thermal decomposition at high temperatures

dangerous decomposition products: COx, SOx, etc.

SECTION 11: Toxicological information

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

The mixture meets the criteria for classification according to EC Regulation No. 1272/2008. The mixture is classified as dangerous in the sense of EC Regulation No. 1272/2008, as amended.

Acute toxicity

The mixture is not classified as acutely toxic by any way of exposure.

sulphamidic acid					
Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD ₅₀	>1600 mg/kg		Rat	
Dermal	LD ₅₀	>2000 mg/kg		Rabbit	

Skin corrosion/irritation

The mixture is classified as irritating to the skin, category 2. Even in diluted form it can show irritating effects on the skin.

Serious eye damage/irritation

The mixture is irritating to the eyes, category 2. Even diluted it has irritating effects on the eyes.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Toxicity for specific target organ - single exposure

Based on available data, the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Inhalation of dust can cause irritation of the respiratory tract and mucous membranes.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) .

K3 W

Creation date 22nd October 2003

Revision date 22nd December 2022 Version 5

11.2. Information on other hazards

It does not contain substances causing disruption of the endocrine system.

The mixture is strongly acidic. Irritating to eyes (watering, burning, redness, conjunctivitis to severe irritation) and skin

(redness, burning, itching). Inhalation of the dust may irritate the mucous membranes. When ingested they may experience irritation of the digestive tract, abdominal pain, nausea.

SECTION 12: Ecological information

12.1. Toxicity

The ecotoxic effects of the mixture were not assessed. Observe the usual environmental precautions.

Acute toxicity

sulphamidic acid					
Parameter	Value	Exposure time	Species	Environment	
LC50	70.3 mg/l	96 hours	Fish (Pimephales promelas)		
EC50	71.6 mg/l	24 hours	Invertebrates (Daphnia magna)		

12.2. Persistence and degradability

The organic components of the mixture are biodegradable.

12.3. Bioaccumulative potential

Low.

12.4. Mobility in soil

The mixture is soluble in water, it is mobile.

12.5. Results of PBT and vPvB assessment

The mixture does not contain substances from the PBT and vPvB groups according to Annex XIII of the REACH Regulation, as amended.

12.6. Endocrine disrupting properties

Substances with these properties in accordance with the criteria set out in Commission Regulation (EU) 2017/2100 or (EU) 2018/605 are not included.

12.7. Other adverse effects

The mixture is classified as harmful to the environment. Mixture leakage can change the pH of the water environment. Prevent leakage into soil, underground or surface water or sewage. Take care of the usual environmental protection measures.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of as hazardous waste, hand over for disposal to a person authorized to handle hazardous waste substances or to the hazardous waste collection yard. Treat contaminated packaging in the same way as with its own dangerous mixture. Do not pour unused product down the drain or dispose of it together with municipal waste. When disposing of the remains of the mixture and packaging, it is necessary to proceed in accordance

with local waste disposal regulations.

Waste management legislation

Act No. 477/2001 Coll., On Packaging, as amended. Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended.

Waste type code

20 01 14* Acids

06 01 06* other acids



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

K3 W

Creation date 22nd October 2003

Revision date 22nd December 2022 Version 5

Packaging waste type code

15 01 10* packaging containing residues of or contaminated by hazardous substances

15 01 02 plastic packaging

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information

14.1. UN number or ID number

UN 2967

14.2. UN proper shipping name

SULPHAMIC ACID

14.3. Transport hazard class(es)

8 Corrosive substances

14.4. Packing group

III

14.5. Environmental hazards

No.

14.6. Special precautions for user

Transport in packages that match the properties of the mixture. Observe the prescribed marking for cargo.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

Additional information

Hazard identification No.

UN number

Classification code

Safety signs



80 2967

8

(E)



Tunnel restriction code

Air transport - ICAO/IATA

Packaging instructions passenger 860 Cargo packaging instructions 864

Marine transport - IMDG

EmS (emergency plan) F-A, S-B

SECTION 15: Regulatory information

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

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. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). Commission Delegated Regulation (EU) 2021/849 of 11 March 2021 amending, for the purposes of adapting to technical and scientific progress, Part 3 of Annex VI to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labeling and packaging of substances and mixtures. REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents, as ammended.Commission Regulation (EU) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals.



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

K3 W

Creation date 22nd October 2003

Revision date 22nd December 2022 Version 5

15.2. Chemical safety assessment

No chemical hazard assessment was performed for this mixture.

SECTION 16: Other information

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

H315 Causes skin irritation. H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection.

P302+P352 IF ON SKIN: Wash with plenty of water and soap.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

Other important information about human health protection

The mixture should not be used for any purpose other than that for which it is intended (see point 1.2). Because the supplier can not control the specific conditions of use of the mixture, it is the responsibility of the user to adapt the prescribed warnings to local laws and regulations. Safety information describes the product in terms of safety and can not be considered as technical product information.

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 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

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

population

log KowOctanol-water partition coefficientNPKMaximum admissible concentrationOELOccupational Exposure Limits

PBT Persistent, Bioaccumulative and Toxic

PEL Permissible Exposure Limit

ppm Parts per million

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Agreement on the transport of dangerous goods by rail



The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) .

K3 W

Creation date 22nd October 2003
Revision date 22nd December 2022 Version 5

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

Aquatic Chronic Hazardous to the aquatic environment (chronic)

Eye Irrit. Eye irritation Skin Irrit. Skin irritation

Training guidelines

According to § 103 and § 104 of Act No. 262/2006 Coll., The Labor Code, as amended. 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

Manufacturer data and toxicological databases.

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

Adaptation of BL updated Annex II of the REACH Regulation as amended by Commission Regulation (EU) 2020/878.

Statement

The safety data sheet contains the data needed to ensure safety and health at work and environmental protection. These data correspond to the current state of knowledge and experience and are in accordance with applicable legal regulations. They can not be considered as a guarantee of the suitability and usability of the product for a specific application. The user is responsible for the treatment under existing laws and regulations.