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

1.1. Product identifier

KRONES multicroma Primer 2201

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

Use of the substance/preparation

Digital auxiliary

Identified Uses

SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites
PROC1	Use in closed process, no likelihood of exposure
PROC2	Use in closed, continuous process with occasional controlled exposure
PROC3	Use in closed batch process (synthesis or formulation)
PROC4	Use in batch and other process (synthesis) where opportunity for exposure arises
PROC5	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
PROC8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
PROC8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC13	Treatment of articles by dipping and pouring
PROC19	Hand-mixing with intimate contact and only PPE available
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles

ERC8a Wide dispersive indoor use of processing aids in open systems ERC8d Wide dispersive outdoor use of processing aids in open systems

Uses advised against

SU21 Consumer uses: Private households (= general public = consumers)

1.3. Details of the supplier of the safety data sheet

Address

KIC KRONES Internationale Cooperationsgesellschaft mbH

Böhmerwaldstraße 5 93073 Neutraubling

Germany

+49 9401 70-3020 Telephone no. Fax no. +49 9401 70-3696

Information provided quality.management@kic-krones.com

by / telephone

1.4. Emergency telephone number

For Hazardous Materials (or Dangerous Goods) Incidents – Spill, Leak, Fire, Exposure, or Accident – call CHEMTREC Day or Night. Within USA and Canada: 1-800-424-9300. Outside USA and Canada: +1 703-741-5970 (collect calls acceeted).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

H225 Flam. Liq. 2

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Eye Irrit. 2 H319

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P264.1 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

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

P337+P313 If eye irritation persists: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

EUH208 Contains Acrylic acid, 3-(trimethoxysilyl) propyl ester, May produce an allergic reaction.

2.3. Other hazards

No special hazards have to be mentioned.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Digital auxiliary based on solvents

Hazardous ingredients

Ethanol

CAS No. 64-17-5 EINECS no. 200-578-6

Registration no. 01-2119457610-43

Concentration >= 50 < 100 %

Classification (Regulation (EC) No. 1272/2008)

Flam. Liq. 2 H225 Eye Irrit. 2 H319

Concentration limits (Regulation (EC) No. 1272/2008)

Eye Irrit. 2 H319 >= 50 %

Acrylic acid, 3-(trimethoxysilyl) propyl ester

CAS No. 4369-14-6 EINECS no. 419-560-6

Registration no. 01-0000016624-70-0001

Concentration >= 0,1 < 1%

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Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4 H332 Skin Corr. 1B H314 Skin Sens. 1 H317 Aquatic Chronic 3 H412

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.

After inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

After skin contact

Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Until now no symptoms known so far.

4.3. Indication of any immediate medical attention and special treatment needed Hints for the physician / treatment

Treat symptomatically

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Recommended: alcohol resistant foam, CO2, powders, water spray/mist

Non suitable extinguishing media

Not be used for safety reasons: water jet

5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2); dense black smoke

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Do not allow to enter drains or waterways. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent - avoid use of solvents.

6.4. Reference to other sections

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear anti-static footwear and clothing and floors should be of the conducting type. Isolate from sources of heat, sparks and open flame. No sparking tools should be used. Avoid skin and eye contact. Avoid the inhalation of particulates and spray mist arising from the application of this mixture. Smoking, eating and drinking shall be prohibited in application area. For personal protection see Section 8. Never use pressure to empty: container is not a pressure vessel. Always keep in containers of same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or water courses.

Advice on protection against fire and explosion

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air

Classification of fires / temperature class / Ignition group / Dust explosion class

Classification of fires B (Combustible liquid substances)

Temperature class T2

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Electrical installations/working materials must comply with the local applied technological safety standards. Storage rooms in which filling operations take place must have a conducting floor. Store in accordance with national regulation

Hints on storage assembly

Store away from oxidising agents, from strongly alkaline and strongly acid materials.

Storage class according to TRGS 510

Storage class according to 3 Flammable liquid

TRGS 510

Further information on storage conditions

Observe label precautions. Keep container dry in a cool, well-ventilated place. Keep container tightly closed. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3. Specific end use(s)

Digital auxiliary

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

Ethanol

List EH40 Type WEL

Value 1920 mg/m³ 1000 ppm(V)

Status: 2011

Derived No/Minimal Effect Levels (DNEL/DMEL)

Ethanol

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure inhalative
Mode of action Systemic effects

Concentration 950 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group

Duration of exposure

Route of exposure

Mode of action

Connectation

Worker

Short term
inhalative
Local effects

Concentration 1900 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 343 mg/kg/d

Type of value Derived No Effect Level (DNEL)

Reference group Consumer

Duration of exposure Long term

Route of exposure inhalative

Mode of action Systemic effects

Concentration 114 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Short term
Route of exposure inhalative
Mode of action Local effects

Concentration 950 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 206 mg/kg/d

Type of value Derived No Effect Level (DNEL)

Reference group Consumer

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Duration of exposure Long term Route of exposure oral

Mode of action Systemic effects

Concentration 87 mg/kg/d

Predicted No Effect Concentration (PNEC)

Ethanol

Type of value PNEC Freshwater

Concentration 0,96 mg/l

Type of value PNEC Saltwater

Concentration 0,79 mg/l

Type of value PNEC

Type Water (intermittent release)

Concentration 2,75 mg/l

Type of value PNEC

Type Sewage treatment plant (STP)

Concentration 580 mg/l

Type of value PNEC

Type Freshwater sediment

Concentration 3,6 mg/kg

Type of value PNEC

Type Marine sediment

Concentration 2,9 mg/kg

Type of value PNEC Type Soil

Concentration 0,63 mg/kg

8.2. Exposure controls

Exposure controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Respiratory protection

If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. Full mask, filter A

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required.

Material thickness > 0,5 mm
Breakthrough time < 30 min

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor

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maintenance.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Eye protection

Use safety eyewear designed to protect against splash of liquids.

Body protection

Cotton or cotton/synthetic overalls or coveralls are normally suitable.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form Liquid

Colourcolourless, clearOdoursolvent-like

Odour threshold

Remarks No data available

pH value

Remarks Not applicable

Melting point

Remarks not determined

Freezing point

Remarks not determined

Initial boiling point and boiling range

Value appr. 78 °C

Pressure 1.013 hPa

Source Literature value

Flash point

Value 12 °C

Evaporation rate (ether = 1):

Remarks not determined

Flammability (solid, gas)

Not applicable

Upper/lower flammability or explosive limits

Lower explosion limit appr. 3,5 %(V) Upper explosion limit appr. 15 %(V)

Source Literature value

Vapour pressure

Value 59 hPa

Temperature 20 °C

Source Literature value

Vapour density

Remarks not determined

Density

Value 0,808 g/cm³

Temperature 20 °C

Method DIN EN ISO 2811

Solubility in water

Remarks partially miscible

Partition coefficient: n-octanol/water

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Remarks Not applicable

Ignition temperature

Value appr. 425 °C

Source Literature value

Efflux time

Value < 12 s

Temperature 20 °C

Method DIN 53211 4 mm

Explosive properties

evaluation no

Oxidising properties

evaluation None known

9.2. Other information

Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability

Stable under recommended storage and handling conditions (see section 7).

10.3. Possibility of hazardous reactions

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.4. Conditions to avoid

When exposed to high temperatures may produce hazardous decomposition products.

10.5. Incompatible materials

No hazardous reactions when stored and handled according to prescribed instructions.

10.6. Hazardous decomposition products

See chapter 5.2 (Firefighting measures - Special hazards arising from the substance or mixture).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

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

Acute dermal toxicity

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

Acute inhalational toxicity

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

Skin corrosion/irritation

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

Serious eye damage/irritation

evaluation irritant

Remarks The classification criteria are met.

Sensitization

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

Mutagenicity

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

Reproductive toxicity

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

Carcinogenicity

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

Specific Target Organ Toxicity (STOT)

Single exposure

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

Repeated exposure

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

Aspiration hazard

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

Experience in practice

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Ingestion may cause nausea, diarrhoea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Other information

There are no data available on the mixture itself.

The mixture has been assessed following the additivity method of the GHS/CLP Regulation (EC) No 1272/2008.

SECTION 12: Ecological information

12.1. Toxicity

General information

There are no data available on the mixture itself.Do not allow to enter drains or water courses.The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as dangerous for the environment.

12.2. Persistence and degradability

General information

No data available

12.3. Bioaccumulative potential

General information

There are no data available on the mixture itself.

Partition coefficient: n-octanol/water

Remarks Not applicable

12.4. Mobility in soil

General information

There are no data available on the mixture itself.

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12.5. Results of PBT and vPvB assessment

General information

There are no data available on the mixture itself.

12.6. Other adverse effects

General information

There are no data available on the mixture itself.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Do not allow to enter drains or water courses.

Wastes and emptied containers should be classified in accordance with relevant national regulation.

The European Waste Catalogue classification of this product, when disposed of as waste is EWC waste code 08 03 12* waste ink containing dangerous substances

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information contact your local waste authority.

Disposal recommendations for packaging

Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.

Empty containers must be scrapped or reconditioned.

Not emptied containers are hazardous waste (waste code number 150110).

SECTION 14: Transport information

Land transport ADR/RID

14.1. UN number

UN 1263

14.2. UN proper shipping name

PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

Class 3 Label 3

14.4. Packing group

Packing group II
Special provision 640D
Limited Quantity 5 I
Transport category 3

14.5. Environmental hazards

-

Tunnel restriction code D/E

Marine transport IMDG/GGVSee

14.1. UN number

UN 1263

14.2. UN proper shipping name

PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

Class 3

14.4. Packing group

Packing group II

14.5. Environmental hazards

no

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Air transport ICAO/IATA

14.1. UN number

UN 1263

14.2. UN proper shipping name

PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

Class

14.4. Packing groupPacking group

14.5. Environmental hazards

-

Information for all modes of transport

14.6. Special precautions for user

Transport within the user's premises:

Always transport in closed containers that are upright and secure.

3

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

no

SECTION 15: Regulatory information

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

Major-accident categories acc. 96/82/EC

Category 7B Highly flammable liquids 5.000.000 kg 50.000.000 kg

VOC

VOC (EU) 0,7 %

VOC (EU) 5.6 q/l

Other information

The product does not contain substances of very high concern (SVHC).

Other information

All components are contained in the TSCA inventory or exempted.

All components are contained in the PICCS inventory.

All components are contained in the IECSC inventory.

All components are contained in the ENCS inventory.

All components are contained in the ECL inventory.

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

Hazard statements listed in Chapter 3

H225 Highly flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

H319 Causes serious eye iri H332 Harmful if inhaled.

H412 Harmful to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Acute Tox. 4 Acute toxicity, Category 4

Aquatic Chronic 3 Hazardous to the aquatic environment, chronic, Category 3

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Eye Irrit. 2 Eye irritation, Category 2
Flam. Liq. 2 Flammable liquid, Category 2
Skin Corr. 1B Skin corrosion, Category 1B
Skin Sens. 1 Skin sensitization, Category 1

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: *** This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship. The information in this Safety Data Sheet is based on the present state of knowledge and current legislation.

It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions.

As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.