

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

KRONES colfix HM 3007
Article number 0901440413

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

Labelling or packaging adhesives

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company KIC KRONES Internationale Cooperationsgesellschaft mbH
 Böhmerwaldstraße 5
 93073 Neutraubling / GERMANY
 Phone +49 9401 70-3020
 Fax +49 9401 70-3696
 Homepage www.kic-krones.com
 E-mail kic@kic-krones.com

Address enquiries to

Technical information kic@kic-krones.com

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +49 (0)89-19240 (24h) (english)

SECTION 2: Hazards identification
2.1 Classification of the substance or mixture

Repr. 1B: H360Df May damage the unborn child. Suspected of damaging fertility.
 Skin Sens. 1: H317 May cause an allergic skin reaction.
 Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

The product is required to be labelled in accordance with GHS/CLP-Directives.

Hazard pictograms

Signal word

DANGER

Contains:

1,3-butadiene-2-methyl-homopolymer, maleated, 2-[(2-methyl-1-oxo-2-propenyl)oxy] ethyl esters

(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate

2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one

Hazard statements

H360Df May damage the unborn child. Suspected of damaging fertility.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.

P261 Avoid breathing vapours / spray.

P273 Avoid release to the environment.

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

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

P308+P313 IF exposed or concerned: Get medical advice / attention.

P501 Dispose of contents/container to in accordance with local/regional/national/international regulation.

Special labelling

Restricted to professional users.

2.3 Other hazards

Other hazards

Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

Product-type:

The product is a mixture.

Range [%]	Substance
20 - 40	1,3-butadiene-2-methyl-homopolymer, maleated, 2-[(2-methyl-1-oxo-2-propenyl)oxy] ethyl esters CAS: 848245-48-7, EINECS/ELINCS: Polymer GHS/CLP: Skin Sens. 1: H317
10 - 20	(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate CAS: 42594-17-2, EINECS/ELINCS: 255-901-3 GHS/CLP: Skin Sens. 1: H317 - Aquatic Chronic 2: H411
0,3 - < 1	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one CAS: 71868-10-5, EINECS/ELINCS: 400-600-6, Reg-No.: 01-0000015054-80-XXXX GHS/CLP: Acute Tox. 4: H302 - Repr. 1B: H360Df - Aquatic Chronic 2: H411

Comment on component parts

Dispersion adhesive based on hydrocarbon resins.
Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Take off contaminated clothing and wash before reuse.

Inhalation

Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact

In case of contact with skin wash off immediately with plenty of water.
In the event of symptoms seek medical treatment.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion

Get medical advice.
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects
Redness
Allergic reactions
Cough
Shortness of breath

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to the doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam, dry powder, water spray jet, carbon dioxide.

Extinguishing media that must not be used

Full water jet

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Carbon monoxide (CO)

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Do not inhale explosion and/or combustion gases.
Collect contaminated firefighting water separately, must not be discharged into the drains.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective equipment. For personal protection see SECTION 8.
High risk of slipping due to leakage/spillage of product.
Ensure adequate ventilation.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.
In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand, sawdust).
Dispose of absorbed material in accordance with the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Avoid spilling or spraying in enclosed areas.
The product is combustible.
Remove contaminated soaked clothing immediately and dispose of safely.
Contaminated work clothing should not be allowed out of the workplace.
Do not eat, drink, smoke or take drugs at work.
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original tightly closed container.
Do not store together with oxidizing agents.
Keep container tightly closed.
Keep container in a well-ventilated place.
Keep in a cool place. Store in a dry place.
Keep away from frost.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection
8.1 Control parameters
Ingredients with occupational exposure limits to be monitored (GB)

not applicable

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Tightly fitting goggles. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. In splash contact: >= 0,4 mm: Nitrile rubber, >60 min (EN 374-1/-2/-3). In full contact: >= 0,4 mm: Nitrile rubber, >480 min (EN 374-1/-2/-3).
Skin protection	Protective clothing.
Other	Do not breathe vapour/spray. Avoid contact with eyes and skin. It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	Breathing apparatus in the event of high concentrations. Half Mask Respirator with ABEKP2 filter. (DIN EN 14387)
Thermal hazards	No information available.
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Color	clear
Odor	faintly
Odour threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not determined
Flash point [°C]	>250 °C/> 482 °F (open cup)
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/ml]	No information available.
Bulk density [kg/m ³]	not applicable
Solubility in water	insoluble
Partition coefficient [n-octanol/water]	No information available.
Viscosity	ca. 720 - 820 mPas (90 °C/194 °F)
Relative vapour density determined in air	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Autoignition temperature [°C]	No information available.
Decomposition temperature [°C]	No information available.

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

In the event of fire: See SECTION 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Substance
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one, CAS: 71868-10-5
LD50, oral, Rat: 1984 mg/kg (OECD 401).

Serious eye damage/irritation	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
Skin corrosion/irritation	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
Respiratory or skin sensitisation	Toxicological data of complete product are not available. Sensitizing. Calculation method
Specific target organ toxicity — single exposure	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
Specific target organ toxicity — repeated exposure	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
Mutagenicity	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
Reproduction toxicity	Toxicological data of complete product are not available. May damage the unborn child. Suspected of damaging fertility. Calculation method
Carcinogenicity	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
Aspiration hazard	Based on the available information, the classification criteria are not fulfilled.
General remarks	none

SECTION 12: Ecological information

12.1 Toxicity

Substance
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one, CAS: 71868-10-5
LC50, (96h), Brachidanio rerio: 9 mg/l (OECD 203).
EC50, (3h), Bacteria: > 100 mg/l (OECD 209).
EC50, (72h), Desmodemus subspicatus: 1,6 mg/l (OECD 201).
EC50, (24h), Daphnia magna: 15,3 mg/l (OECD 202).
NOEC, (21d), Daphnia magna: 1 mg/l (OECD 211).
NOEC, (72h), Desmodemus subspicatus: 0,86 mg/l (OECD 201).

12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	No information available.
Biological degradability	CAS 42594-17-2 (OECD 301F) - The product is not readily biodegradable. CAS 71868-10-5 (OECD 301B) - The product is not readily biodegradable.

12.3 Bioaccumulative potential

CAS 42594-17-2: logKow: 4,6 (OECD 117)
CAS 71868-10-5: logKow: 3,09

12.4 Mobility in soil

CAS 71868-10-5: BCF: < 10,0 (56d, OECD 305)

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

Ecological data of complete product are not available.

Do not discharge product unmonitored into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

For recycling, consult manufacturer.

Waste no. (recommended)

080409*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended)

150101

150102

150104

150110*

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

not applicable

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

EEC-REGULATIONS 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC; (EU) 2015/830

TRANSPORT-REGULATIONS DOT-Classification, ADR (2015); IMDG-Code (2015, 37. Amdt.); IATA-DGR (2016).

NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011). CHIP 3/ CHIP 4

- **Observe employment restrictions for people** Observe employment restrictions for young people.
Observe employment restrictions for mothers-to-be and nursing mothers.

- **VOC (1999/13/CE)** 0 %

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information
**16.1 Hazard statements
(SECTION 03)**

H360Df May damage the unborn child. Suspected of damaging fertility.
 H302 Harmful if swallowed.
 H411 Toxic to aquatic life with long lasting effects.
 H317 May cause an allergic skin reaction.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
 CAS = Chemical Abstracts Service
 CLP = Classification, Labelling and Packaging
 DMEL = Derived Minimum Effect Level
 DNEL = Derived No Effect Level
 EC50 = Median effective concentration
 ECB = European Chemicals Bureau
 EEC = European Economic Community
 EINECS = European Inventory of Existing Commercial Chemical Substances
 ELINCS = European List of Notified Chemical Substances
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
 IC50 = Inhibition concentration, 50%
 IMDG = International Maritime Code for Dangerous Goods
 IUCLID = International Uniform Chemical Information Database
 LC50 = Lethal concentration, 50%
 LD50 = Median lethal dose
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships
 PBT = Persistent, Bioaccumulative and Toxic substance
 PNEC = Predicted No-Effect Concentration
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
 TLV@/TWA = Threshold limit value – time-weighted average
 TLV@STEL = Threshold limit value – short-time exposure limit
 VOC = Volatile Organic Compounds
 vPvB = very Persistent and very Bioaccumulative

16.3 Other information
Classification procedure

Repr. 1B: H360Df May damage the unborn child. Suspected of damaging fertility. (Calculation method)
 Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)
 Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. (Calculation method)

Modified position

SECTION 15 been added: Restricted to professional users.

SECTION 2 deleted: H335 May cause respiratory irritation.

SECTION 2 deleted: The product is classified and required to be labelled in accordance with EC-Directives

SECTION 2 been added: The product is required to be labelled in accordance with GHS/CLP-Directives.

SECTION 2 deleted: WARNING

SECTION 2 deleted: H315 Causes skin irritation.

SECTION 2 deleted: Skin Irrit. 2

SECTION 2 deleted: Eye Irrit. 2

SECTION 2 deleted: STOT SE 3

SECTION 2 been added: Repr. 1B

SECTION 2 been added: Gesundheitsgefahr

SECTION 2 been added: P302+P352 IF ON SKIN: Wash with plenty of water / soap.

SECTION 2 deleted: H319 Causes serious eye irritation.

SECTION 2 been added: P501 Dispose of contents/container to in accordance with local/regional/national/international regulation.

SECTION 2 been added: DANGER

SECTION 2 deleted: P312 Call a POISON CENTER / doctor if you feel unwell.

SECTION 2 been added: P308+P313 IF exposed or concerned: Get medical advice / attention.

SECTION 2 been added: P280 Wear protective gloves / protective clothing / eye protection / face protection.

SECTION 2 deleted: P280 Wear protective gloves / eye protection / face protection.

SECTION 2 been added: P201 Obtain special instructions before use.

SECTION 2 been added: H360Df May damage the unborn child. Suspected of damaging fertility.

SECTION 5 been added: Collect contaminated firefighting water separately, must not be discharged into the drains.

SECTION 6 deleted: Use personal protective equipment.

SECTION 6 been added: Ensure adequate ventilation.

SECTION 6 been added: Wear suitable protective equipment. For personal protection see SECTION 8.

SECTION 7 deleted: Keep away from all sources of ignition.

SECTION 7 been added: Keep container tightly closed.

SECTION 7 been added: Use barrier skin cream.

SECTION 7 been added: Contaminated work clothing should not be allowed out of the workplace.

SECTION 7 deleted: Remove soiled or soaked clothing.

SECTION 7 been added: Remove contaminated soaked clothing immediately and dispose of safely.

SECTION 7 been added: Avoid spilling or spraying in enclosed areas.

SECTION 8 been added: Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.

SECTION 8 deleted: safety glasses (EN 166:2001)

SECTION 8 been added: It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin.

SECTION 8 been added: Tightly fitting goggles. (EN 166:2001)

SECTION 9 deleted: not determined

SECTION 9 been added: No information available.

SECTION 9 deleted: insoluble

SECTION 11 been added: Sensitizing.

SECTION 11 deleted: not determined

SECTION 11 been added: Toxicological data of complete product are not available.

SECTION 11 been added: Based on the available information, the classification criteria are not fulfilled.

SECTION 11 been added: Toxicological data of complete product are not available.

SECTION 11 been added: Calculation method

SECTION 11 deleted: not determined

SECTION 11 been added: Toxicological data of complete product are not available.

SECTION 11 been added: May damage the unborn child.

SECTION 11 been added: Suspected of damaging fertility.

SECTION 11 been added: Calculation method

SECTION 11 deleted: not determined

SECTION 12 deleted: No information available.

SECTION 12 deleted: not determined

SECTION 12 been added: The product is not readily biodegradable.

SECTION 12 been added: Based on all available information not to be classified as PBT or vPvB respectively.

SECTION 12 been added: No information available.

SECTION 15 deleted: 5.2.5.

SECTION 15 been added: 5.2.7.

SECTION 15 deleted: Storage class 10 (VCI)

SECTION 15 been added: Storage class 6.1C (VCI)

SECTION 15 been added: TRGS 400: Risk assessment

SECTION 15 been added: TRGS 905: List of substances causing cancer, mutagenic or being dangerous to reproduction.

SECTION 16 been added: Observe employment restrictions for mothers-to-be and nursing mothers.

SECTION 16 been added: Calculation method

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