

## SAFETY DATA SHEET

M-CHEM 401 ACID RESISTANT HIGH TEMPERATURE COATING  
EXTENDED CURE - ACTIVATOR

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Compilation date: 10/12/2018

Revision No: 3

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

**Product name:** M-CHEM 401 ACID RESISTANT HIGH TEMPERATURE COATING EXTENDED CURE ACTIVATOR

**Product code:** M-CHEM 401

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

#### 1.3. Details of the supplier of the safety data sheet

**Company name:** Maxkote Limited

Tower Court, Oakdale Road  
Clifton Moor  
Yorks  
North Yorkshire  
YO30 4XL  
United Kingdom

**Tel:** 01904 809 773

**Email:** [info@MaxKote.co.uk](mailto:info@MaxKote.co.uk)

#### 1.4. Emergency telephone number

**Emergency tel:** +44 (0) 1904 809 773

### Section 2: Hazards identification

#### 2.1. Classification of the substance or mixture

**Classification under CHIP:** Xn: R20/22; C: R34; Sens.: R43; -: R52/53; Xn: R62

**Classification under CLP:** Acute Tox. 4: H302; Aquatic Chronic 3: H412; Repr. 2: H361f; Skin Corr. 1B: H314; Skin Sens. 1A: H317

**Most important adverse effects:** Harmful by inhalation and if swallowed. Causes burns. May cause sensitisation by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of impaired fertility.

#### 2.2. Label elements

**Label elements:**

**Hazard statements:** H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H361f: Suspected of damaging fertility.

H412: Harmful to aquatic life with long lasting effects.

**Signal words:** Danger

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**Hazard pictograms:** GHS05: Corrosion  
GHS07: Exclamation mark  
GHS08: Health hazard



**Precautionary statements:** P102: Keep out of reach of children.  
P202: Do not handle until all safety precautions have been read and understood.  
P260: Do not breathe vapours.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P302+352: IF ON SKIN: Wash with plenty of water/.  
P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+313: If skin irritation or rash occurs: Get medical advice/attention.  
P501: Dispose of contents/container to hazardous or special waste collection point.

#### Label elements under CHIP:

**Hazard symbols:** Corrosive.



**Risk phrases:** R20/22: Harmful by inhalation and if swallowed.  
R34: Causes burns.  
R43: May cause sensitisation by skin contact.  
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R62: Possible risk of impaired fertility.

**Safety phrases:** S1/2: Keep locked up and out of the reach of children.  
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S29: Do not empty into drains.  
S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.  
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

#### 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

[cont...]

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### Section 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous ingredients:

###### BENZYL ALCOHOL

EINECS	CAS	CHIP Classification	CLP Classification	Percent
202-859-9	100-51-6	Xn: R20/22	Acute Tox. 4: H332; Acute Tox. 4: H302	10-30%

###### 4-TERT-BUTYLPHENOL

202-679-0	98-54-4	Xi: R38; Xi: R41; Xn: R62	Repr. 2: H361f; Skin Irrit. 2: H315; Eye Dam. 1: H318	10-30%
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###### M-PHENYLENEBIS(METHYLAMINE)

216-032-5	1477-55-0	C: R34; Xn: R20/22; Sens.: R43	Skin Corr. 1B: H314; Acute Tox. 4: H302; Skin Sens. 1: H317; Aquatic Chronic 3: H412; Acute Tox. 4: H332	10-30%
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###### TRIMETHYLHEXANE-1,6-DIAMINE

247-063-2	25513-64-8	C: R34; Xn: R22; Sens.: R43	Skin Corr. 1C: H314; Acute Tox. 4: H302; Skin Sens. 1A: H317; Aquatic Chronic 3: H412; Acute Tox. 4: H312	1-10%
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###### 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

220-666-8	2855-13-2	Xn: R21/22; C: R34; Sens.: R43; -: R52/53	Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412	1-10%
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###### 4,4'-ISOPROPYLIDENEDIPHENOL

201-245-8	80-05-7	Xn: R62; Xi: R37; Xi: R41; Sens.: R43; -: R52	Repr. 2: H361f; STOT SE 3: H335; Eye Dam. 1: H318; Skin Sens. 1: H317	1-10%
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###### 3-AMINOPROPYLDIMETHYLAMINE

203-680-9	109-55-7	-: R10; Xn: R22; C: R34; Sens.: R43	Flam. Liq. 3: H226; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317	1-10%
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###### 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

202-013-9	90-72-2	Xn: R22; Xi: R36/38	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315	1-10%
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###### PHENOL, STYROLISED

262-975-0	61788-44-1	Xi: R38; Sens.: R43; N: R51/53	Skin Irrit. 2: H315; Skin Sens. 1: H317; Aquatic Chronic 2: H411	1-10%
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### Section 4: First aid measures

#### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin.

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Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

**Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

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

**Skin contact:** Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

**Eye contact:** Corneal burns may occur. May cause permanent damage.

**Ingestion:** Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

**Inhalation:** There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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

**Immediate / special treatment:** Not applicable.

### Section 5: Fire-fighting measures

#### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

#### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** Corrosive. In combustion emits toxic fumes.

#### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

### Section 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Notify the police and fire brigade immediately. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access

[cont...]

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to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.  
Do not handle in a confined space. Avoid the formation or spread of mists in the air.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed.

**Suitable packaging:** Must only be kept in original packaging.

### 7.3. Specific end use(s)

**Specific end use(s):** No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Hazardous ingredients:**

**4,4'-ISOPROPYLIDENEDIPHENOL**

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	-	-

### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.

[cont...]

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**Hand protection:** Impermeable gloves.

**Eye protection:** Tightly fitting safety goggles. Ensure eye bath is to hand.

**Skin protection:** Impermeable protective clothing.

### Section 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Amber

**Odour:** Ammoniacal

**Solubility in water:** Insoluble

**Viscosity:** Non-viscous

**Boiling point/range°C:** >200

**Flash point°C:** >100

**Autoflammability°C:** 380

**Relative density:** 1.05

#### 9.2. Other information

**Other information:** No data available.

### Section 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

#### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.

#### 10.4. Conditions to avoid

**Conditions to avoid:** Heat.

#### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong acids.

#### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes.

### Section 11: Toxicological information

#### 11.1. Information on toxicological effects

[cont...]

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### Hazardous ingredients:

#### BENZYL ALCOHOL

IVN	RAT	LD50	53	mg/kg
ORL	MUS	LD50	1360	mg/kg
ORL	RAT	LD50	1230	mg/kg

#### M-PHENYLENEBIS(METHYLAMINE)

DERMAL	RAT	LD50	3100	mg/kg
ORAL	RAT	LD50	930	mg/kg

#### TRIMETHYLHEXANE-1,6-DIAMINE

DERMAL	RAT	LD50	1280	mg/kg
ORAL	RAT	LD50	910	mg/kg

#### 4,4'-ISOPROPYLIDENEDIPHENOL

ORL	MUS	LD50	2400	mg/kg
ORL	RAT	LD50	3250	mg/kg

#### 3-AMINOPROPYLDIMETHYLAMINE

ORL	RAT	LD50	1870	mg/kg
SKN	RBT	LD50	600	µl/kg

#### 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

ORL	RAT	LD50	1200	mg/kg
SKN	RAT	LD50	1280	mg/kg

#### PHENOL, STYROLISED

DERMAL	RAT	LD50	>2000	mg/kg
ORAL	RAT	LD50	>2000	mg/kg

### Relevant effects for mixture:

Effect	Route	Basis
Acute toxicity (harmful)	INH ING	Hazardous: calculated
Corrosivity	OPT INH DRM	Hazardous: calculated
Sensitisation	DRM	Hazardous: calculated
Toxicity for reproduction	--	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

**Eye contact:** Corneal burns may occur. May cause permanent damage.

[cont...]

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**Ingestion:** Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

**Inhalation:** There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

### Section 12: Ecological information

#### 12.1. Toxicity

**Hazardous ingredients:**

##### M-PHENYLENEBIS(METHYLAMINE)

DAPHNIA	48H EC50	15.2	mg/l
FISH	96H LC50	>100	mg/l

##### TRIMETHYLHEXANE-1,6-DIAMINE

FISH	48H EC50	174	mg/l
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##### PHENOL, STYROLISED

DAPHNIA	48H EC50	1-10	mg/l
FISH	96H LC50	14.8	mg/l

#### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

#### 12.4. Mobility in soil

**Mobility:** Readily absorbed into soil.

#### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

#### 12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

### Section 13: Disposal considerations

#### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

[cont...]



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### Section 14: Transport information

#### 14.1. UN number

UN number: UN2735

#### 14.2. UN proper shipping name

Shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.  
(4-TERT-BUTYLPHENOL)

#### 14.3. Transport hazard class(es)

Transport class: 8

#### 14.4. Packing group

Packing group: III

#### 14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

#### 14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

### Section 15: Regulatory information

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

Specific regulations: Not applicable.

#### 15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

### Section 16: Other information

#### Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H226: Flammable liquid and vapour.

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

[cont...]

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H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H335: May cause respiratory irritation.

H361f: Suspected of damaging fertility.

H411: Toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

R10: Flammable.

R20/22: Harmful by inhalation and if swallowed.

R21/22: Harmful in contact with skin and if swallowed.

R22: Harmful if swallowed.

R34: Causes burns.

R36/38: Irritating to eyes and skin.

R37: Irritating to respiratory system.

R38: Irritating to skin.

R41: Risk of serious damage to eyes.

R43: May cause sensitisation by skin contact.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52: Harmful to aquatic organisms.

R62: Possible risk of impaired fertility.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.