



## SAFETY DATA SHEET

ACRYL-HÄRTER MS 2:1 NORMAL

Page 1

Issued: 20.11.2009

Revision No: 2

### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**Product name:** ACRYL-HÄRTER MS 2:1 NORMAL

**Product code:** I3

**Use of substance / preparation:** Surface coating

**Company name:** AIRO CHEMIE

A. Schmiemann GmbH & Co KG

Carl-Leverkus Str. 27

D - 40764 Langenfeld

Deutschland

Tel: [49] 02173 8538-0

Fax: [49] 02173 8538-60

Emergency tel: 030-30686790

Email: firmenservice@giftnotruf.de

### 2. HAZARDS IDENTIFICATION

**Main hazards:** Flammable. Harmful by inhalation and in contact with skin. May cause sensitisation by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking.

**Other hazards:** In use, may form flammable / explosive vapour-air mixture.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous ingredients:** ALIPHATISCHES POLYISOCYANAT 20-40%

[Sens.] R43

- N-BUTYL ACETATE 20-40%

EINECS: 204-658-1 CAS: 123-86-4

[-] R10; [-] R66; [-] R67

- XYLENE 10-20%

EINECS: 215-535-7 CAS: 1330-20-7

[-] R10; [Xn] R20/21; [Xi] R38

- LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. 10-20%

EINECS: 265-199-0 CAS: 64742-95-6

[T] R46; [Xn] R65; [-] R10; [Xi] R37; [N] R51/53

- 2-METHOXY-1-METHYLETHYL ACETATE 1-10%

EINECS: 203-603-9 CAS: 108-65-6

[-] R10; [Xi] R36

[cont...]

**4. FIRST AID MEASURES (SYMPTOMS)**

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**4. FIRST AID MEASURES (ACTION)**

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing media:** Alcohol or polymer foam. Carbon dioxide. Dry chemical powder. Use water spray to cool containers.

**Exposure hazards:** Flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture.

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

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. Eliminate all sources of ignition.

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

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

**7. HANDLING AND STORAGE**

**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. Smoking is forbidden. Use non-sparking tools.

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition.

[cont...]

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Hazardous ingredients:** N-BUTYL ACETATEWEL (8 hr TWA): 724 mg/m<sup>3</sup> WEL (15 min STEL): 966 mg/m<sup>3</sup>

- XYLENE

WEL (8 hr TWA): 220 mg/m<sup>3</sup> WEL (15 min STEL): 441 mg/m<sup>3</sup>

- 2-METHOXY-1-METHYLETHYL ACETATE

WEL (8 hr TWA): 274 mg/m<sup>3</sup> WEL (15 min STEL): 548 mg/m<sup>3</sup>**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.**Hand protection:** Impermeable gloves.**Eye protection:** Safety glasses. Ensure eye bath is to hand.**Skin protection:** Impermeable protective clothing.**9. PHYSICAL AND CHEMICAL PROPERTIES****State:** Liquid**Colour:** Colourless**Solubility in water:** Not miscible**Also soluble in:** Most organic solvents.**Viscosity:** Non-viscous**Viscosity value:** 14 sec**Boiling point/range°C:** 127**Melting point/range°C:** n.v.**Flammability limits %: lower:** 1**upper:** 7,6**Flash point°C:** 32**Part.coeff. n-octanol/water:** n.v.**Autoflammability°C:** 370**Vapour pressure:** 10,7 mbar**Relative density:** 0,965 g/cm<sup>3</sup>**pH:** n.a.**VOC g/l:** 600**10. STABILITY AND REACTIVITY****Stability:** Stable under normal conditions. Stable at room temperature.**Conditions to avoid:** Heat. Hot surfaces. Sources of ignition. Flames.**Materials to avoid:** Strong oxidising agents. Strong acids.**Haz. decomp. products:** In combustion emits toxic fumes.

**11. TOXICOLOGICAL INFORMATION****Hazardous ingredients:** N-BUTYL ACETATE

ORL MUS LD50 6 gm/kg

ORL RAT LD50 10768 mg/kg

## • XYLENE

ORL MUS LD50 2119 mg/kg

ORL RAT LD50 4300 mg/kg

SCU RAT LD50 1700 mg/kg

• LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM),  
LIGHT AROM.

ORL RAT LD50 8400 mg/kg

## • 2-METHOXY-1-METHYLETHYL ACETATE

IPR MUS LD50 750 mg/kg

ORL RAT LD50 8532 mg/kg

**Routes of exposure:** Refer to section 4 of SDS for routes of exposure and corresponding symptoms.**12. ECOLOGICAL INFORMATION****Mobility:** Readily absorbed into soil.**Persistence and degradability:** Biodegradable.**Bioaccumulative potential:** No bioaccumulation potential.**Other adverse effects:** Negligible ecotoxicity.**13. DISPOSAL CONSIDERATIONS****Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.**Waste code number:** 08 05 01**Disposal of packaging:** Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.**14. TRANSPORT INFORMATION****ADR / RID****UN no:** 1263**ADR Class:** 3**Packing group:** III**Classification code:** F1**Shipping name:** PAINT**Labelling:** 3**Hazard ID no:** 30

**IMDG / IMO**

**UN no:** 1263 **Class:** 3  
**Packing group:** III **EmS:** F-E,S-E\*  
**Marine pollutant:** .  
**Labelling:** 3

**IATA / ICAO**

**UN no:** 1263 **Class:** 3  
**Packing group:** III  
**Packing instructions:** 309(P&CA); 310(CAO)  
**Labelling:** 3

**15. REGULATORY INFORMATION**

**Hazard symbols:** Harmful.



**Risk phrases:** R10: Flammable.  
R20/21: Harmful by inhalation and in contact with skin.  
R43: May cause sensitisation by skin contact.  
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65: Harmful: may cause lung damage if swallowed.  
R66: Repeated exposure may cause skin dryness or cracking.

**Safety phrases:** S36/37: Wear suitable protective clothing and gloves.  
S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

**Haz. ingredients (label):** ALIPHATISCHES POLYISOCYANAT; N-BUTYL ACETATE; LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.; XYLENE

**Seveso II guideline:** Yes

**Water hazard class:** 2 Classification by VwVwS

**Air emission directive:** Class: II Item no: 5.2.5 Amount m%: 15-20

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

## 16. OTHER INFORMATION

**Other information:** This safety data sheet is prepared in accordance with Regulation (EC) No 1907/2006.

**Risk phrases used in s.3:** R43: May cause sensitisation by skin contact.  
R10: Flammable.  
R66: Repeated exposure may cause skin dryness or cracking.  
R67: Vapours may cause drowsiness and dizziness.  
R20/21: Harmful by inhalation and in contact with skin.  
R38: Irritating to skin.  
R46: May cause heritable genetic damage.  
R65: Harmful: may cause lung damage if swallowed.  
R37: Irritating to respiratory system.  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R36: Irritating to eyes.

**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.



## SAFETY DATA SHEET

ACRYL-HÄRTER MS 2:1 KURZ

Page 1

Issued: 20.11.2009

Revision No: 2

### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**Product name:** ACRYL-HÄRTER MS 2:1 KURZ

**Product code:** I4

**Use of substance / preparation:** Surface coating

**Company name:** AIRO CHEMIE

A. Schmiemann GmbH & Co KG

Carl-Leverkus Str. 27

D - 40764 Langenfeld

Deutschland

Tel: [49] 02173 8538-0

Fax: [49] 02173 8538-60

Emergency tel: 030-30686790

Email: firmenservice@giftnotruf.de

### 2. HAZARDS IDENTIFICATION

**Main hazards:** Flammable. Harmful by inhalation and in contact with skin. May cause sensitisation by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking.

**Other hazards:** In use, may form flammable / explosive vapour-air mixture.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous ingredients:** ALIPHATISCHES POLYISOCYANAT 20-40%

[Sens.] R43

- N-BUTYL ACETATE 20-40%

EINECS: 204-658-1 CAS: 123-86-4

[-] R10; [-] R66; [-] R67

- XYLENE 10-20%

EINECS: 215-535-7 CAS: 1330-20-7

[-] R10; [Xn] R20/21; [Xi] R38

- LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. 10-20%

EINECS: 265-199-0 CAS: 64742-95-6

[T] R46; [Xn] R65; [-] R10; [Xi] R37; [N] R51/53

- 2-METHOXY-1-METHYLETHYL ACETATE 1-10%

EINECS: 203-603-9 CAS: 108-65-6

[-] R10; [Xi] R36

[cont...]

**4. FIRST AID MEASURES (SYMPTOMS)**

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**4. FIRST AID MEASURES (ACTION)**

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing media:** Alcohol or polymer foam. Carbon dioxide. Dry chemical powder. Use water spray to cool containers.

**Exposure hazards:** Flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture.

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

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. Eliminate all sources of ignition.

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

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

**7. HANDLING AND STORAGE**

**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. Smoking is forbidden. Use non-sparking tools.

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition.

[cont...]

**Suitable packaging:** Coated steel.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Hazardous ingredients:** N-BUTYL ACETATE

WEL (8 hr TWA): 724 mg/m<sup>3</sup> WEL (15 min STEL): 966 mg/m<sup>3</sup>

- XYLENE

WEL (8 hr TWA): 220 mg/m<sup>3</sup> WEL (15 min STEL): 441 mg/m<sup>3</sup>

- 2-METHOXY-1-METHYLETHYL ACETATE

WEL (8 hr TWA): 274 mg/m<sup>3</sup> WEL (15 min STEL): 548 mg/m<sup>3</sup>

**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

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

**Hand protection:** Impermeable gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Impermeable protective clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**State:** Liquid

**Colour:** Colourless

**Solubility in water:** Not miscible

**Also soluble in:** Most organic solvents.

**Viscosity:** Non-viscous

**Viscosity value:** 14 sec

**Boiling point/range°C:** 127

**Melting point/range°C:** n.v.

**Flammability limits %: lower:** 1

**upper:** 7,6

**Flash point°C:** 32

**Part.coeff. n-octanol/water:** n.v.

**Autoflammability°C:** 370

**Vapour pressure:** 10,7 mbar

**Relative density:** 0,965

**pH:** n.a.

**VOC g/l:** 602

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions. Stable at room temperature.

**Conditions to avoid:** Heat. Hot surfaces. Sources of ignition. Flames.

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

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

## 11. TOXICOLOGICAL INFORMATION

**Hazardous ingredients:** N-BUTYL ACETATE

ORL MUS LD50 6 gm/kg

ORL RAT LD50 10768 mg/kg

- XYLENE

ORL MUS LD50 2119 mg/kg

ORL RAT LD50 4300 mg/kg

SCU RAT LD50 1700 mg/kg

- LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM),  
LIGHT AROM.

ORL RAT LD50 8400 mg/kg

- 2-METHOXY-1-METHYLETHYL ACETATE

IPR MUS LD50 750 mg/kg

ORL RAT LD50 8532 mg/kg

**Routes of exposure:** Refer to section 4 of SDS for routes of exposure and corresponding symptoms.

## 12. ECOLOGICAL INFORMATION

**Mobility:** Readily absorbed into soil.

**Persistence and degradability:** Biodegradable.

**Bioaccumulative potential:** No bioaccumulation potential.

**Other adverse effects:** Negligible ecotoxicity.

## 13. DISPOSAL CONSIDERATIONS

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

**Waste code number:** 08 05 01

**Disposal of packaging:** Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

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

## 14. TRANSPORT INFORMATION

### ADR / RID

**UN no:** 1263

**ADR Class:** 3

**Packing group:** III

**Classification code:** F1

**Shipping name:** PAINT

**Labelling:** 3

**Hazard ID no:** 30



**IMDG / IMO**

**UN no:** 1263 **Class:** 3  
**Packing group:** III **EmS:** F-E,S-E\*  
**Marine pollutant:** .  
**Labelling:** 3

**IATA / ICAO**

**UN no:** 1263 **Class:** 3  
**Packing group:** III  
**Packing instructions:** 309(P&CA); 310(CAO)  
**Labelling:** 3

**15. REGULATORY INFORMATION**

**Hazard symbols:** Harmful.



**Risk phrases:** R10: Flammable.  
R20/21: Harmful by inhalation and in contact with skin.  
R43: May cause sensitisation by skin contact.  
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65: Harmful: may cause lung damage if swallowed.  
R66: Repeated exposure may cause skin dryness or cracking.

**Safety phrases:** S36/37: Wear suitable protective clothing and gloves.  
S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

**Haz. ingredients (label):** ALIPHATISCHES POLYISOCYANAT; N-BUTYL ACETATE; LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.; XYLENE

**Seveso II guideline:** Yes

**Water hazard class:** 2 Classification by VwVwS

**Air emission directive:** Class: II Item no: 5.2.5 Amount m%: 15-20

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

## 16. OTHER INFORMATION

**Other information:** This safety data sheet is prepared in accordance with Regulation (EC) No 1907/2006.

**Risk phrases used in s.3:** R43: May cause sensitisation by skin contact.  
R10: Flammable.  
R66: Repeated exposure may cause skin dryness or cracking.  
R67: Vapours may cause drowsiness and dizziness.  
R20/21: Harmful by inhalation and in contact with skin.  
R38: Irritating to skin.  
R46: May cause heritable genetic damage.  
R65: Harmful: may cause lung damage if swallowed.  
R37: Irritating to respiratory system.  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R36: Irritating to eyes.

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ACRYL-HÄRTER MS 2:1 EXTRA KURZ

Page 1

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Revision No: 2

**1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING**

**Product name:** ACRYL-HÄRTER MS 2:1 EXTRA KURZ

**Product code:** I9

**Use of substance / preparation:** Surface coating

**Company name:** AIRO CHEMIE

A. Schmiemann GmbH & Co KG

Carl-Leverkus Str. 27

D - 40764 Langenfeld

Deutschland

Tel: [49] 02173 8538-0

Fax: [49] 02173 8538-60

Emergency tel: 030-30686790

Email: firmenservice@giftnotruf.de

**2. HAZARDS IDENTIFICATION**

**Main hazards:** Highly flammable. May cause sensitisation by skin contact. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Possible risk of harm to the unborn child.  
Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

**Other hazards:** In use, may form flammable / explosive vapour-air mixture.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

**Hazardous ingredients:** ALIPHATISCHES POLYISOCYANAT 20-40%

[Sens.] R43

- N-BUTYL ACETATE 20-40%

EINECS: 204-658-1 CAS: 123-86-4

[-] R10; [-] R66; [-] R67

- TOLUENE 10-20%

EINECS: 203-625-9 CAS: 108-88-3

[F] R11; [Xi] R38; [Xn] R48/20; [Xn] R63; [Xn] R65; [-] R67

- ETHYL ACETATE 10-20%

EINECS: 205-500-4 CAS: 141-78-6

[F] R11; [Xi] R36; [-] R66; [-] R67

- ISOPHORONDIISOCYANAT-HOMOPOLYMER 1-10%

[Sens.] R43

- LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. 1-10%

EINECS: 265-199-0 CAS: 64742-95-6

[T] R46; [Xn] R65; [-] R10; [Xi] R37; [N] R51/53

[cont...]

**4. FIRST AID MEASURES (SYMPTOMS)**

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**4. FIRST AID MEASURES (ACTION)**

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing media:** Alcohol or polymer foam. Carbon dioxide. Dry chemical powder. Use water spray to cool containers.

**Exposure hazards:** Highly flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture. Vapour may travel considerable distance to source of ignition and flash back.

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

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. Eliminate all sources of ignition.

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

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

**7. HANDLING AND STORAGE**

**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. Smoking is forbidden. Use non-sparking tools.

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed. Keep away from sources of

ignition. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition.

**Suitable packaging:** Coated steel.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Hazardous ingredients:** N-BUTYL ACETATE

WEL (8 hr TWA): 724 mg/m<sup>3</sup> WEL (15 min STEL): 966 mg/m<sup>3</sup>

- TOLUENE

WEL (8 hr TWA): 191 mg/m<sup>3</sup> WEL (15 min STEL): 384 mg/m<sup>3</sup>

- ETHYL ACETATE

WEL (8 hr TWA): 200 ppm WEL (15 min STEL): 400 ppm

**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

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

**Hand protection:** Impermeable gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Impermeable protective clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**State:** Liquid

**Colour:** Colourless

**Odour:** Aromatic

**Solubility in water:** Not miscible

**Also soluble in:** Most organic solvents.

**Viscosity:** Non-viscous

**Viscosity value:** 14 s

**Boiling point/range°C:** 77

**Melting point/range°C:** n.V.

**Flammability limits %: lower:** 2,1

**upper:** 11,5

**Flash point°C:** 6

**Part.coeff. n-octanol/water:** n.V.

**Autoflammability°C:** 460

**Vapour pressure:** 96,8 mbar

**Relative density:** 0,965 g/cm<sup>3</sup>

**pH:** n.a.

**VOC g/l:** 571

**10. STABILITY AND REACTIVITY**

**Stability:** Stable under normal conditions. Stable at room temperature.

**Conditions to avoid:** Heat. Hot surfaces. Sources of ignition. Flames.

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

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

**11. TOXICOLOGICAL INFORMATION**

**Hazardous ingredients:** N-BUTYL ACETATE

ORL MUS LD50 6 gm/kg

ORL RAT LD50 10768 mg/kg

- TOLUENE

IVN RAT LD50 1960 mg/kg

ORL MUS LD50 2 gm/kg

ORL RAT LD50 6900 mg/kg

- ETHYL ACETATE

ORL MUS LD50 4100 mg/kg

ORL RAT LD50 5620 mg/kg

SCU RAT LDLO 5 gm/kg

- LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM),  
LIGHT AROM.

ORL RAT LD50 8400 mg/kg

**Routes of exposure:** Refer to section 4 of SDS for routes of exposure and corresponding symptoms.

**12. ECOLOGICAL INFORMATION**

**Mobility:** Readily absorbed into soil.

**Persistence and degradability:** Biodegradable.

**Bioaccumulative potential:** No bioaccumulation potential.

**Other adverse effects:** Negligible ecotoxicity.

**13. DISPOSAL CONSIDERATIONS**

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

**Waste code number:** 08 05 01

**Disposal of packaging:** Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

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

**14. TRANSPORT INFORMATION**

**ADR / RID**

<b>UN no:</b> 1263	<b>ADR Class:</b> 3
<b>Packing group:</b> III	<b>Classification code:</b> F1
<b>Shipping name:</b> PAINT	
<b>Labelling:</b> 3	<b>Hazard ID no:</b> 30



**IMDG / IMO**

<b>UN no:</b> 1263	<b>Class:</b> 3
<b>Packing group:</b> III	<b>EmS:</b> F-E,S-E*
<b>Marine pollutant:</b> .	
<b>Labelling:</b> 3	

**IATA / ICAO**

<b>UN no:</b> 1263	<b>Class:</b> 3
<b>Packing group:</b> III	
<b>Packing instructions:</b> 309(P&CA); 310(CAO)	
<b>Labelling:</b> 3	

**15. REGULATORY INFORMATION**

**Hazard symbols:** Highly flammable.  
 Harmful.



**Risk phrases:** R11: Highly flammable.  
 R43: May cause sensitisation by skin contact.  
 R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
 R63: Possible risk of harm to the unborn child.  
 R65: Harmful: may cause lung damage if swallowed.  
 R66: Repeated exposure may cause skin dryness or cracking.  
 R67: Vapours may cause drowsiness and dizziness.

**Safety phrases:** S36/37: Wear suitable protective clothing and gloves.  
 S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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**Precautionary phrases:** Contains isocyanates. See information supplied by the manufacturer.

**Haz. ingredients (label):** TOLUENE; ETHYL ACETATE; N-BUTYL ACETATE; ALIPHATISCHES POLYISOCYANAT;  
ISOPHORONDIISOCYANAT-HOMOPOLYMER

**Seveso II guideline:** Yes

**Water hazard class:** 2 Classification by VwVwS

**Air emission directive:** Class: II Item no: 5.2.5 Amount m%: 15-20

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

## 16. OTHER INFORMATION

**Other information:** This safety data sheet is prepared in accordance with Regulation (EC) No 1907/2006.

**Risk phrases used in s.3:** R43: May cause sensitisation by skin contact.  
R10: Flammable.  
R66: Repeated exposure may cause skin dryness or cracking.  
R67: Vapours may cause drowsiness and dizziness.  
R11: Highly flammable.  
R38: Irritating to skin.  
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
R63: Possible risk of harm to the unborn child.  
R65: Harmful: may cause lung damage if swallowed.  
R36: Irritating to eyes.  
R46: May cause heritable genetic damage.  
R37: Irritating to respiratory system.  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**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.



## SAFETY DATA SHEET

ACRYL-HÄRTER MS 2:1 EXTRA-LANG

Page 1

Issued: 20.11.2009

Revision No: 2

### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**Product name:** ACRYL-HÄRTER MS 2:1 EXTRA-LANG

**Product code:** IF

**Use of substance / preparation:** Surface coating

**Company name:** AIRO CHEMIE

A. Schmiemann GmbH & Co KG

Carl-Leverkus Str. 27

D - 40764 Langenfeld

Deutschland

Tel: [49] 02173 8538-0

Fax: [49] 02173 8538-60

Emergency tel: 030-30686790

Email: firmenservice@giftnotruf.de

### 2. HAZARDS IDENTIFICATION

**Main hazards:** Flammable. Irritating to respiratory system. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

**Other hazards:** In use, may form flammable / explosive vapour-air mixture.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous ingredients:** ALIPHATISCHES POLYISOCYANAT 20-40%

[Sens.] R43

- LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. 20-40%

EINECS: 265-199-0 CAS: 64742-95-6

[T] R46; [Xn] R65; [-] R10; [Xi] R37; [N] R51/53

- N-BUTYL ACETATE 20-40%

EINECS: 204-658-1 CAS: 123-86-4

[-] R10; [-] R66; [-] R67

- 2-METHOXY-1-METHYLETHYL ACETATE 1-10%

EINECS: 203-603-9 CAS: 108-65-6

[-] R10; [Xi] R36

### 4. FIRST AID MEASURES (SYMPTOMS)

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

[cont...]

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

#### 4. FIRST AID MEASURES (ACTION)

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

#### 5. FIRE-FIGHTING MEASURES

**Extinguishing media:** Alcohol or polymer foam. Carbon dioxide. Dry chemical powder. Use water spray to cool containers.

**Exposure hazards:** Flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture.

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

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. Eliminate all sources of ignition.

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

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

#### 7. HANDLING AND STORAGE

**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. Smoking is forbidden. Use non-sparking tools.

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition.

**Suitable packaging:** Coated steel.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Hazardous ingredients:** N-BUTYL ACETATE

WEL (8 hr TWA): 724 mg/m<sup>3</sup> WEL (15 min STEL): 966 mg/m<sup>3</sup>

- 2-METHOXY-1-METHYLETHYL ACETATE

WEL (8 hr TWA): 274 mg/m<sup>3</sup> WEL (15 min STEL): 548 mg/m<sup>3</sup>

**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

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

**Hand protection:** Impermeable gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Impermeable protective clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**State:** Liquid

**Colour:** Colourless

**Solubility in water:** Not miscible

**Also soluble in:** Most organic solvents.

**Viscosity:** Non-viscous

**Viscosity value:** 14 sec

**Boiling point/range°C:** 127

**Melting point/range°C:** n.v.

**Flammability limits %: lower:** 1

**upper:** 7,6

**Flash point°C:** 32

**Part.coeff. n-octanol/water:** n.v.

**Autoflammability°C:** 370

**Vapour pressure:** 10,7 mbar

**Relative density:** 0,965 g/cm<sup>3</sup>

**pH:** n.a.

**VOC g/l:** 600

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions. Stable at room temperature.

**Conditions to avoid:** Heat. Hot surfaces. Sources of ignition. Flames.

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

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

## 11. TOXICOLOGICAL INFORMATION

**Hazardous ingredients:** LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM),  
LIGHT AROM.

ORL RAT LD50 8400 mg/kg

- N-BUTYL ACETATE

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ORL MUS LD50 6 gm/kg

ORL RAT LD50 10768 mg/kg

- 2-METHOXY-1-METHYLETHYL ACETATE

IPR MUS LD50 750 mg/kg

ORL RAT LD50 8532 mg/kg

**Routes of exposure:** Refer to section 4 of SDS for routes of exposure and corresponding symptoms.

## 12. ECOLOGICAL INFORMATION

**Mobility:** Readily absorbed into soil.

**Persistence and degradability:** Biodegradable.

**Bioaccumulative potential:** No bioaccumulation potential.

**Other adverse effects:** Negligible ecotoxicity.

## 13. DISPOSAL CONSIDERATIONS

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

**Waste code number:** 08 05 01

**Disposal of packaging:** Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

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

## 14. TRANSPORT INFORMATION

### ADR / RID

**UN no:** 1263

**ADR Class:** 3

**Packing group:** III

**Classification code:** F1

**Shipping name:** PAINT

**Labelling:** 3

**Hazard ID no:** 30



### IMDG / IMO

**UN no:** 1263

**Class:** 3

**Packing group:** III

**EmS:** F-E,S-E\*

**Marine pollutant:** .

**Labelling:** 3

### IATA / ICAO

**UN no:** 1263

**Class:** 3

**Packing group:** III

**Packing instructions:** 309(P&CA); 310(CAO)

**Labelling:** 3

## 15. REGULATORY INFORMATION

**Hazard symbols:** Harmful.

Dangerous for the environment.



**Risk phrases:** R10: Flammable.

R37: Irritating to respiratory system.

R43: May cause sensitisation by skin contact.

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

R65: Harmful: may cause lung damage if swallowed.

R66: Repeated exposure may cause skin dryness or cracking.

R67: Vapours may cause drowsiness and dizziness.

**Safety phrases:** S24: Avoid contact with skin.

S37: Wear suitable gloves.

S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

**Haz. ingredients (label):** LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.; N-BUTYL ACETATE; ALIPHATISCHES POLYISOCYANAT

**Seveso II guideline:** Yes

**Water hazard class:** 2 Classification by VwVwS

**Air emission directive:** Class: III Amount m%: 40-50

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

## 16. OTHER INFORMATION

**Other information:** This safety data sheet is prepared in accordance with Regulation (EC) No 1907/2006.

**Risk phrases used in s.3:** R43: May cause sensitisation by skin contact.

R46: May cause heritable genetic damage.

R65: Harmful: may cause lung damage if swallowed.

R10: Flammable.

R37: Irritating to respiratory system.

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

R66: Repeated exposure may cause skin dryness or cracking.

R67: Vapours may cause drowsiness and dizziness.

R36: Irritating to eyes.

**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.