according to Regulation (EC) No. 1907/2006



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Commercial Product Name: ALEXIT BR12H0-BladeRep Hardener 12

Quality No.: 4053D00000000

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

#### 1.1 Product identifier

Trade name : ALEXIT BR12H0-BladeRep Hardener 12 farblos / transparent

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

Use of the : Industrial serial painting

Substance/Mixture

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

Company : Mankiewicz Gebr. & Co.

(GmbH & Co. KG)

Georg-Wilhelm-Straße 189

21107 Hamburg +4940751030

Telephone Telefax +494075103375 E-mail address sdb\_info@umco.de

## 1.4 Emergency telephone number

+49 (0) 551 / 19240 (Toxic agent information centre North / NORD)

## **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

## Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 Skin sensitization, Category 1 Specific target organ toxicity - single exposure, Category 3, Central nervous

system

H226: Flammable liquid and vapour. H317: May cause an allergic skin reaction. H336: May cause drowsiness or dizziness.

### Classification (67/548/EEC, 1999/45/EC)

Flammable R10: Flammable.

Sensitising R43: May cause sensitization by skin contact.

R66: Repeated exposure may cause skin dryness

or cracking.

R67: Vapours may cause drowsiness and

dizziness.

## 2.2 Label elements

## Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms





Signal word

Hazard statements Flammable liquid and vapour. H226

> May cause an allergic skin reaction. H317 H336 May cause drowsiness or dizziness.

Supplemental Hazard

Statements

**EUH066** Repeated exposure may cause skin

dryness or cracking.

Precautionary statements Prevention:

> P210 Keep away from heat/sparks/open

> > flames/hot surfaces. - No smoking.

P261 Avoid breathing dust/ fume/ gas/ mist/

vapours/spray.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take

off immediately all contaminated clothing.

Rinse skin with water/ shower.

P312 Call a POISON CENTER or doctor/

physician if you feel unwell.

If skin irritation or rash occurs: Get medical P333 + P313

advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical

or alcohol-resistant foam for extinction.

Hazardous components which must be listed on the label:

28182-81-2 aliphatic polyisocyanate

123-86-4 n-butyl acetate

822-06-0 hexamethylene-di-isocyanate

### **Additional Labelling:**

EUH204 Contains isocyanates. May produce an allergic reaction.

## 2.3 Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

# **SECTION 3: Composition/information on ingredients**

### 3.2 Mixtures

Chemical nature : Hardener based on polyisocyanates

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### **Hazardous components**

Chemical Name CAS-No. EC-No. Registration number Remarks	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]	
aliphatic polyisocyanate 28182-81-2 500-060-2	R43	Skin Sens. 1; H317	>= 40 - <= 100	
hexamethylene-di-isocyanate 822-06-0 212-485-8 01-2119457571-37 Note 2	T; R23 Xi; R36/37/38 R42/43	Acute Tox. 3; H331 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335	>= 0,25 - < 0,5	
WEL substance :				
n-butyl acetate 123-86-4 204-658-1 01-2119485493-29	R10 R66 R67	Flam. Liq. 3; H226 STOT SE 3; H336	>= 25 - < 40	

For the full text of the R-phrases mentioned in this Section, see Section 16. For the full text of the H-Statements mentioned in this Section, see Section 16.

## **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

General advice : In all cases of doubt, or when sickness symptoms persist,

seek medica lattention.

Never give anything by mouth to an unconscious person.

If inhaled : Remove to fresh air, keep patient warm and at rest.

> Irregular breathing/no breathing: artificial respiration. If unconscious place in recovery position and seek medical

advice.

In case of skin contact : Take off all contaminated clothing immediately.

Wash skin thoroughly with soap and water or use recognised

skin cleanser.

Do NOT use solvents or thinners!

In case of eye contact : Remove contact lenses, irrigate copiously with clean, fresh

water for at least 10 minutes, holding the eyelids apart and

seek medical advice.

: Do NOT induce vomiting. If swallowed

> If accidentally swallowed obtain immediate medical attention. Never give anything by mouth to an unconscious person.

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Keep at rest.

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

Symptoms : No information available.

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

Treatment : No information available.

## **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Suitable extinguishing media : Alcohol resistant foam, CO2, powders, water spray

Unsuitable extinguishing

media

: High volume water jet

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

Specific hazards during

firefighting

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous combustion

products

### 5.3 Advice for firefighters

Special protective equipment

for firefighters

: Appropriate breathing apparatus may be required.

Further information : Cool endangered containers with water in case of fire. 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

Personal precautions : Exclude sources of ignition and ventilate the area.

Do not inhale vapours.

Refer to protective measures listed in sections 7 and 8. Immediately clean contaminated areas with following

substances:

Water 45 Vol.% Ethanol or Isopropyl Alcohol 50 Vol.% Ammonia solution (density=0,88) 5 Vol.%

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Alternative applicable to that (not flammable): Sodium Carbonate 5 Vol.% Water 95 Vol.%

## 6.2 Environmental precautions

Environmental precautions

: Do not let product enter drains.

If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. Add the same decontaminant to the remnants and let stand for several days until no further reaction in non-sealed container. Once this stage is reached, close container and dispose according to local regulations.

### 6.3 Methods and materials for containment and cleaning up

Methods for 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 chapter 13).

Clean preferably with a detergent; avoid use of solvents.

#### 6.4 Reference to other sections

For personal protection see section 8.

## **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Advice on safe handling

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used! Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the occupational exposure limits. Comply with the health and safety at work laws. Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion

: The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use earthing leads whentransferring from one container to another. Operators should wear anti-static footwear and clothing. No sparking tools should be used. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

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## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Electrical equipment should be protected to the appropriate standard. Floors should be of the conducting type. Keep container tightly closed. Never use pressure to empty: container isnot a pressure vessel. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Further information on storage conditions

: Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and direct sunlight. Keep container dry in a cool, well-ventilated place. Precautions should be taken to minimise exposure to atmospheric humidityor water: CO2 will be formed which in closed containers can result in pressurisation. DO NOT KEEP

THE CONTAINERS SEALED!!

Advice on common storage

: Keep away from oxidising agents and strongly acid or alkaline

materials.

Storage temperature

: 5 - 35 °C

7.3 Specific end use(s)

Specific use(s) : This information is not available.

## **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

# Components with workplace control parameters

CAS-No.	Source	Value	Ceiling Limit Value	Update
n-butyl acetate				
123-86-4	Occupational	150 ml/m3		01.09.2003
204-658-1	Exposure	724 mg/m3		
	Standards			
	(OESs) / EH40			

### 8.2 Exposure controls

**Engineering measures** 

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Provide adequate ventilation. Where reasonably practicable this shoul be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and below the OEL (= Occupational Exposure Limit), suitable respiratory protection must be worn.

## Personal protective equipment

Eye protection : Wear safety goggles to protect against solvent splashes.

Hand protection

Remarks : Adhere to the professional organisation rule "Use of protective

gloves". Appropriate chemicals resistant glove tested in

compliance with EN 374.

Recommendation for protection against components generally

found in the products:

For short-term contact (i.e. splash protection):

Appropriate material: nitrile rubber, Neoprene

Material thickness: > 0.4 mm Breakthrough time: >480 min

Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Preventive hand protection (skin protection cream) recommended. Wash immediately contaminated skin. Design operations thus to avoid permanent use of protective gloves.

Skin and body protection

Personal should wear antistatic clothings made of natural fiber or ofhigh temperature resistant synthetic fiber. All parts of the

body shouldbe washed after contact.

Respiratory protection : By spraying: air-fed respirator.

> By other operations than spraying: in well ventilated areas, air-fed respirators could be replaced by a combination

of charcoal filter andparticulate filter mask

Persons with a history of asthma, allergies, chronic or Protective measures

recurrent respiratory disease should not be employed in any

process in which this preparation is used. Do not eat or drink during work - no smoking. Avoid product contact with skin, eyes and clothing.

Avoid the inhalation of dust from sanding, particulates and spray mist arising from the application of this preparation.

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## **Environmental exposure controls**

General advice : Do not let product enter drains.

> If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. Add the same decontaminant to the remnants and let stand for several days until no further reaction in non-sealed container. Once this stage is reached, close container and

dispose according to local regulations.

## **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

**Appearance** : liquid

Colour according product name

Odour : characteristic Odour Threshold no data available pН : no data available

Boiling point/boiling range : ca. 120 °C

35 °C Flash point

Melting point/range

Method: ISO 2719

: no data available

Evaporation rate : no data available Flammability (solid, gas) : no data available Burning rate : no data available

Lower explosion limit : 1,0 %(V)

Upper explosion limit : 10,0 %(V)

Vapour pressure : ca. 100 hPa at 50 °C

Relative vapor density : no data available Relative density : no data available

: ca. 1,06 g/cm3 at 20 °C Density

Water solubility : insoluble

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Solubility in other solvents : no data available

Miscibility with water : immiscible

Partition coefficient: n-

octanol/water

: no data available

 $: > 400 \, ^{\circ}\text{C}$ Ignition temperature

Thermal decomposition : no data available

Flow time

Cross section: 4 mm Method: DIN 53211

Explosive properties : no data available Oxidizing properties : no data available

9.2 Other information

Solvent separation test : < 3 %(V)

## **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions No dangerous reaction known under conditions of normal use.

There are no data available on the preparation itself.

10.4 Conditions to avoid

: Stable under recommended storage and handling conditions Conditions to avoid

(See section 7).

10.5 Incompatible materials

Materials to avoid : Keep away from oxidizing agents, strongly alkaline and

> strongly acid materials in order to avoid exothermic reactions. The product reacts slowly with water resulting in evolution of carbon dioxide. In closed containers, pressure build up could result distortion blowing and in extreme cases bursting of the

container.

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#### 10.6 Hazardous decomposition products

Hazardous decomposition products

: In a fire, hazardous decomposition products, such as smoke, carbon monoxide, carbon dioxiode, oxides of nitrogen, hydrogen cyanide, monomers of isocyanates, amines and alcohols may be produced.

Other information

In a fire, hazardous decomposition products, such as smoke, carbon monoxide, carbon dioxiode, oxides of nitrogen, hydrogen cyanide, monomers of isocyanates, amines and alcohols may be produced.

## **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

#### Product:

Acute inhalation toxicity : Acute toxicity estimate : > 20 mg/l

> Test atmosphere: vapour Method: Calculation method

Further information

: Exposure of vapour concentration in excess of the stated OEL's 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 extrem cases, loss of consciousness., Repeated or prolonged contact with the preparation 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., Based on the properties of the isocyanate components and considering toxicological data on similar preparations: This preparation may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and a thightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability.

: The product was classified in toxicological terms on the basis of the results of the calculation procedure outlined within General Directive on Preparations (1999/45/EC).

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## **SECTION 12: Ecological information**

### 12.1 Toxicity

### **Product:**

Ecotoxicology Assessment

: There are no data available on the preparation itself. Acute aquatic toxicity

## 12.2 Persistence and degradability

Product:

Biodegradability : There are no data available on the preparation itself.

12.3 Bioaccumulative potential

**Product:** 

Bioaccumulation : There are no data available on the preparation itself.

12.4 Mobility in soil

Product:

: There are no data available on the preparation itself. Mobility

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This mixture contains no substance considered to be

persistent, bioaccumulating nor toxic (PBT)., This mixture contains no substance considered to be very persistent nor

very bioaccumulating (vPvB).

12.6 Other adverse effects

**Product:** 

Additional ecological

information

: There are no data available on the preparation itself.

The product should not be allowed to enter drains or water

courses.

# **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

**Product** : The listed waste code numbers, according to the European

Waste Catalogue, are to be understood as a recommendation. A final decision must be made in agreement with the regional

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waste disposal company.

Contaminated packaging : Contaminated packaging should be emptied as far as possible

and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

Waste key for the unused

product

: 080111 waste paint and varnish containing organic solvents or

other dangerous substances

# **SECTION 14: Transport information**

### 14.1 ADR

UN Number : 1263

Description of the goods : PAINT RELATED MATERIAL

Class : 3
Packaging group : III
Classification Code : F1
Hazard identification No : 30
ADR/RID-Labels : 3

Tunnel restriction code : Tunnelcode D/E

Special Provision 640E

Environmentally hazardous: no

### 14.2 IMDG

Substance No. : UN 1263

Description of the goods : PAINT RELATED MATERIAL

Class : 3
Packaging group : III
IMDG-Labels : 3
EmS Number : F-E,

EmS Number : F-E, S-E Marine Pollutant : no

### 14.3 IATA

UN Number : 1263

Description of the goods : PAINT RELATED MATERIAL

Class : 3
Packaging group : III
ICAO-Labels : 3
Packing instruction (cargo : 366

aircraft)

Environmentally hazardous : no Packing instruction : 355

(passenger aircraft)

Packing instruction : Y344

(passenger aircraft)

| Manklewicz Gebr. & Co. (GmbH & Co. KG) | Bank Name | Deutsche Bank | Hamburg | 600227300 | 200 700 00 | DEUTDEH+000 | DE58 2007 0000 0600 2273 0 | De59 2007 0000 0600 2273 0 | Persönlich haftende Gesellschafterin: Certific | Persön

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#### 14.4 Other information

: If transported within the user's premises: To be transported always in closed, upright and safe containers. Make sure that persons handling these containers are aware of the rules of conduct in case of incident or spillage.

#### 14.5 Environmental hazards

Information on environmental hazards, if relevant, pls. see 14.1 - 14.3.

## 14.6 Special precautions for user

For personal protection see section 8.

# 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

## **SECTION 15: Regulatory information**

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

Directive 1999/13/EC : VOC content excluding water 25 %

265 g/l

Other regulations : The information given in this material safety data sheet does

not release the user from its duty of risk assessment and control in the work place defined in other health and safety

law.

Adhere to the national sanitary and occupational safety

regulations when using this product.

### 15.2 Chemical Safety Assessment

## **SECTION 16: Other information**

### **Full text of R-Phrases**

R10 Flammable. R23 Toxic by inhalation.

R36/37/38 Irritating to eyes, respiratory system and skin.

R42/43 May cause sensitization by inhalation and skin contact.

R43 May cause sensitization by skin contact.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

### **Full text of H-Statements**

H226 Flammable liquid and vapour.

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H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

Acute Tox. Acute toxicity

#### **Further information**

Note 2 The concentration of isocyanate stated is the percentage by weight of

the free monomer calculated with reference to the total weight of the

mixture.

### **Further information**

Other information : This safety datasheet complies with the requirements of

regulation (EC) No 1907/2006(453/2010).

## Department issuing safety data sheet

**UMCO Umwelt Consult GmbH** 

Georg-Wilhelm-Str. 183, D-21107 Hamburg

Telefon: +49 (0)40 / 79 02 36 300 Fax: +49 (0)40 / 79 02 36 357 e-mail: umco@umco.de

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