

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)



Commercial Product Name: ALEXIT-FST Füller 495-14  
Quality No.: 4951400000000

Revision Date 13.12.2010  
Print Date 14.12.2010

Version 3

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

### Product information

Trade name : ALEXIT-FST Füller 495-14 farblos / transparent

Use of the Substance/Mixture : edge and core filler

Company : Mankiewicz Gebr. & Co.  
Georg-Wilhelm-Straße 189  
DE-21107 Hamburg

Telephone : +4940751030  
Telefax : +494075103375  
E-mail address : sdb\_info@umco.de  
Emergency telephone : +49 (0) 551 / 19240 (Toxic agent information centre North /  
NORD)

## 2. HAZARDS IDENTIFICATION

Symbol(s) : Xn Harmful

R-phrases(s) : R40 Limited evidence of a carcinogenic effect.  
R42/43 May cause sensitization by inhalation and  
skin contact.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture of synthetic resins and organic solvents

### Hazardous components

Chemical Name	CAS/EC/Index No.	Classification	Concentration[%]
aliphatic polyisocyanate	28182-81-2 500-060-2 -	R43	>= 50 - <= 100
DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES	9016-87-9 - 615-005-00-9	Xn; R20 - Xi; R36/37/38 - Carc.Cat.3; R40 - Xn; R42/43 - Xn; R48/20	>= 1 - < 5

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

## 4. FIRST AID MEASURES

General advice : In all cases of doubt, or when sickness symptoms persist, seek medical attention.  
Never give anything by mouth to an unconscious person.

Inhalation : 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

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- advice.
- 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 !
- Eye contact : Remove contact lenses, irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.
- Ingestion : Do NOT induce vomiting.  
If accidentally swallowed obtain immediate medical attention.  
Never give anything by mouth to an unconscious person.  
Keep at rest.

## 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Alcohol resistant foam, CO2, powders, water spray
- Extinguishing media which shall not be used for safety reasons : High volume water jet
- Specific hazards during fire fighting : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Special protective equipment for fire-fighters : 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!!**

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Exclude sources of ignition and ventilate the area.  
Do not inhale vapours.  
Refer to protective measures listed in sections 7 and 8.
- 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.
- 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.

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Additional advice : Immediately clean contaminated areas with following substances:

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

Alternative applicable to that (not flammable):

Sodium Carbonate	5 Vol.%
Water	95 Vol.%

## 7. HANDLING AND STORAGE

### 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 !  
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 : No special protective measures against fire required.

### Storage

Requirements for storage areas and containers : Keep container tightly closed. Never use pressure to empty: container is not 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 humidity or water: CO<sub>2</sub> 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 : -30 - -5 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering measures

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

## Personal protective equipment

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 and particulate filter mask

Hand protection : 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.

Eye protection : Wear safety goggles to protect against splashes.

Skin and body protection : Personal should wear antistatic clothings made of natural fiber or of high temperature resistant synthetic fiber. All parts of the body should be washed after contact.

Protective measures : 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.  
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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General Information

Form : liquid

Mankiewicz Gebc. & Co. (GmbH & Co. KG)  
Georg-Wilhelm-Strabe 169  
21107 Hamburg (Stilhelmstrabe)  
Tel.: +49 (0) 40 / 75 10 30  
Fax: +49 (0) 40 / 75 10 33 75  
www.mankiewicz.de

Bank Name	Ort	Kto.-Nr.	BLZ	BIC	IBAN
Deutsche Bank	Hamburg	603227300	200 700 00	DEUTDE33HAN	DE58 2007 0000 0000 2273 00
HypoRealbank	Hamburg	58273000	200 300 00	HYVEDE33HAN	DE34 2003 0000 0000 2730 00
Postbank	Hamburg	373205	200 100 20	PSBKDE33HAN	DE85 2001 0000 0000 3732 05

Sto-Registriergericht Hamburg: HFA 42442  
Büreau/Vertrieb  
Certification:  
ISO 9001:  
TS 16949:  
EN 9100  
Michael C. Grau  
Sto-Registriergericht Hamburg: HFB 17189  
Geschäftsführer/Gesellschafter:  
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Colour : according product name  
Odour : characteristic

## Important health, safety and environmental information

Boiling point/boiling range : ca.120 °C  
Flash point : 100 °C  
Method: ISO 2719  
Ignition temperature : > 200 °C  
Lower explosion limit : Note: no data available  
Upper explosion limit : Note: no data available  
Vapour pressure : 100 hPa  
at 50 °C  
Density : 0,9 g/cm<sup>3</sup>  
at 20 °C  
Water solubility : Note: insoluble  
Flow time : > 150 s  
Method: DIN 53211

## 10. STABILITY AND REACTIVITY

Conditions to avoid : Stable under recommended storage and handling conditions (See section 7).  
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.  
Hazardous decomposition products : In a fire, hazardous decomposition products, such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, monomers of isocyanates, amines and alcohols may be produced.

## 11. TOXICOLOGICAL INFORMATION

Further information : 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.

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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 tightness 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.

Further information : 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).

## **12. ECOLOGICAL INFORMATION**

Additional ecological information : There are no data available on the preparation itself.  
Additional ecological information : The product should not be allowed to enter drains or water courses.

## **13. DISPOSAL CONSIDERATIONS**

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 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

## **14. TRANSPORT INFORMATION**

### **ADR**

Not dangerous goods

### **IMDG**

Not dangerous goods

### **IATA**

Not dangerous goods

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.

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Not classified as dangerous in the meaning of transport regulations.

## 15. REGULATORY INFORMATION

### Labelling according to EC Directives 1999/45/EC

Symbol(s)	: Xn	Harmful
R-phrase(s)	: R40 R42/43	Limited evidence of a carcinogenic effect. May cause sensitization by inhalation and skin contact.
S-phrase(s)	: S23 S36/37  S45  S60	Do not breathe vapours, aerosols. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste.

### Hazardous components which must be listed on the label:

aliphatic polyisocyanate  
DIPHENYLMETHANE-4,4'-DIISOCYANATE, ISOMERES AND HOMOLOGUES

Special labelling of certain mixtures	: Contains isocyanates. See information supplied by the manufacturer.
Directive 99/13/EC	: not applicable:
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.

## 16. OTHER INFORMATION

### Full text of R-phrases referred to under sections 2 and 3

R20	Harmful by inhalation.
R36/37/38	Irritating to eyes, respiratory system and skin.
R40	Limited evidence of a carcinogenic effect.
R42/43	May cause sensitization by inhalation and skin contact.
R43	May cause sensitization by skin contact.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.

### Further information

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Büro/Vertrieb: Certification:  
Persönlich haftende Gesellschaftern: ISO 9001:  
Grau Geb. Beteiligungs-GmbH TS 16949:  
Sto-Registriergericht Hamburg: HRB 17189 TS 16949:  
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This safety datasheet complies with the requirements of regulation (EC) No 1907/2006.

## Department issuing safety data sheet

UMCO Umwelt Consult GmbH  
Georg-Wilhelm-Str. 183b, D-21107 Hamburg  
Telefon: +49 (0)40 / 41 92 13 00 Fax: +49 (0)40 / 41 92 13 57 e-mail: umco@umco.de

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.





# ALEXIT® FST Füller / Filler 495-14

Technical Datasheet 495-14

## Characteristics



- Solvent-free two-component filling primer
- Low density
- Quick curing at room temperature
- High resistance against agents (e.g. hydraulic liquid, high humidity) after curing
- Low heat release
- Fulfils the FST properties of the aerospace industry with regard to:

### Flammability

FAR/JAR/CS § 25.853 (a) and App. F, Part I § (a) (1) (I)

### Smoke Gas Density

FAR/JAR/CS § 25.853 (d) and App. F, Part V § (b)

### Toxicity

ABD 0031 and AITM 3.0005

### Heat Release

FAR/JAR/CS § 25.853 (d) and App. F, Part IV § (h)

## Range of Application

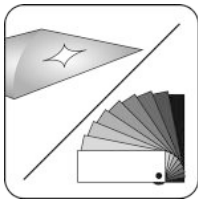


For the stiffening and sealing of sandwich components (edge and core filling areas) with prepreg honeycomb structures used in the cabin interior (aerospace industry).

Accredited in acc. with:

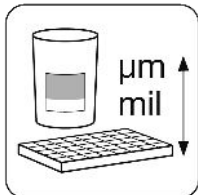
- DAN 1282-01-1990 (Airbus)
- DAN 437 (Airbus)
- DON 329 (Dornier)

## Color and Gloss



Color: blue

## Theoretical Coverage



Area	Quantity	Film thickness
1530 m <sup>2</sup>	1 kg	1 µm

Cured: 0.65 ± 0.05 g/cm<sup>3</sup>



# ALEXIT® FST Füller / Filler 495-14

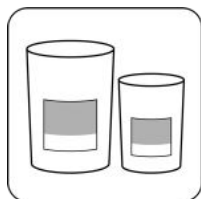
Technical Datasheet 495-14

## Surface Pre-treatment



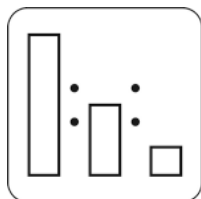
- The substrate has to be free from release agents.
- After curing, ALEXIT FST Füller 495-14 offers excellent linking to EP and PF topcoats and to Nomex honeycombs.
- Good adhesion to all common metals and woods.

## Trade Names and Packaging



Material	Trade name	Container size [net]
Base material	ALEXIT FST Füller / Filler 495-14	400 ml
+ Hardener (aluminium bag)	+ ALEXIT FST Härter / Hardener 491-14 (set code 549-14)	+ 200 ml = 600 ml

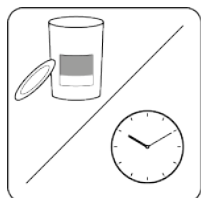
## Mixing



	Base	Hardener
Trade name	ALEXIT FST Füller 495-14	ALEXIT FST Härter 491-14
By weight	2	1

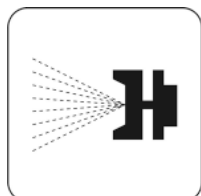
The tin sizes are harmonized. No weighing of the components is necessary.

## Pot Life



approx. 45 - 50 min at 20 °C (68 °F)

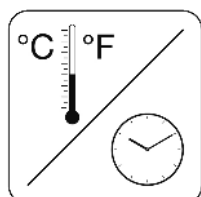
## Application



Please observe the technical recommendations of the equipment manufacturers.

- Make sure the tins are at room temperature
- Knead the single components with gloved hands

## Drying



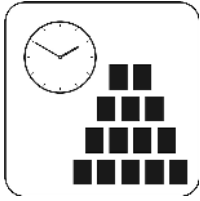
	20 °C (68 °F)	80 °C (176 °F)
Sandable / ready for milling	approx. 8 h	30 min
Fully cured	7 d	

The temperature specified is the object temperature.

Dry the material at 80 °C right after application to ensure efficient further processing.



**Shelf Life**



Material	Shelf life
Base material + Hardener	12 months at -30 °C to -18 °C (-22 °F to 0 °F)
	6 months at -17 °C to -5 °C (1 °F to 23 °F)
	4 months at -4 °C to +25 °C (24 °F to 77 °F) / < 70 % rH

The storage data specified relates to unopened original containers.

The interruption of the cold chain up to 14 days during transport does not reduce the overall shelf life.

The storage data specified relates to unopened original Packaging Units.

**Additional Details**



The substrate and the film thicknesses applied have an impact on the compliance with the requirements of the aerospace industry.

The information contained in this document is based on our current state of research and development. Revisal by the user with regard to the intended purpose is necessary due to the variety of processing options and fields of application – please refer to the General Terms and Conditions of Sale.

