

INDEX

MSDS-Foster_82-77_A_061221V10_EN	2
MSDS-Foster_82-77_B_180222V11_EN	12
MSDS-Foster_82-77_C_180222V7_EN	22

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.12.2021

Version number 10

Revision: 06.12.2021

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

- **1.1 Product identifier**
- **Trade name: Foster 82-77 comp. A**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Glue/ Sising agent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
H.B. Fuller, Isar-Rakoll, S.A.
Estrada Nacional 13
PT-4486-851 Mindelo - Vila do Conde
+351 229 288 200
- **EU-MSDS@hbfuller.com**
- **Further information obtainable from:** Regulatory Department
- **1.4 Emergency telephone number:** +44 (0) 1235 239 670 (24 hrs)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



Muta. 2 H341 Suspected of causing genetic defects.



Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07



GHS08



GHS09

- **Signal word** Warning
- **Hazard-determining components of labelling:**
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
2,3-epoxypropyl neodecanoat
Bisphenol A-(epichlorhydrin); epoxy resin(number average molecular weight<700)
- **Hazard statements**
H315 Causes skin irritation.
H319 Causes serious eye irritation.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.12.2021

Version number 10

Revision: 06.12.2021

Trade name: Foster 82-77 comp. A

(Contd. of page 1)

- H317 May cause an allergic skin reaction.
 H341 Suspected of causing genetic defects.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards**Results of PBT and vPvB assessment**

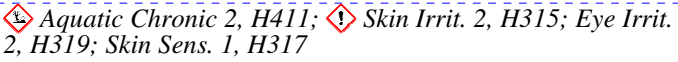
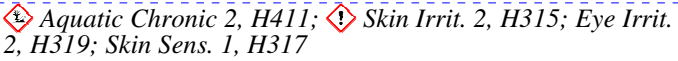
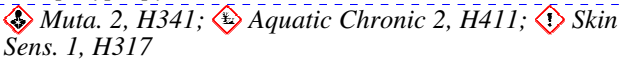
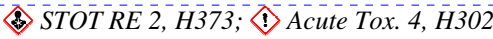
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

- **Description:** Mixture of substances listed below with additions.

Dangerous components:

CAS: 1675-54-3 EINECS: 216-823-5	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane 	25-<50%
CAS: 25068-38-6 NLP: 500-033-5	Bisphenol A-(epichlorhydrin); epoxy resin(number average molecular weight<700) 	25-<50%
CAS: 26761-45-5 EINECS: 247-979-2 Reg.nr.: 01-2119431597-33-0000	2,3-epoxypropyl neodecanoat 	10-<25%
CAS: 107-21-1 EINECS: 203-473-3 Reg.nr.: 01-2119456816-28	Ethane-1,2-diol 	1-<3%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- **General information:** Immediately remove any clothing soiled by the product.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:** If symptoms persist consult doctor.

- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.12.2021

Version number 10

Revision: 06.12.2021

Trade name: Foster 82-77 comp. A

(Contd. of page 2)

- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.
- **Additional information** Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid contact with skin, eyes and clothes.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Open and handle receptacle with care.
Use only in well ventilated areas.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.

· **Ingredients with limit values that require monitoring at the workplace:**

CAS: 107-21-1 Ethane-1,2-diol

WEL	Short-term value: 104** mg/m ³ , 40** ppm
	Long-term value: 10* 52** mg/m ³ , 20** ppm
	Sk *particulate **vapour

- **Regulatory information** WEL: EH40/2020

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.12.2021

Version number 10

Revision: 06.12.2021

Trade name: Foster 82-77 comp. A

(Contd. of page 3)

· DNELs		
CAS: 25068-38-6 Bisphenol A-(epichlorhydrin); epoxy resin(number average molecular weight<700)		
Oral	Acute - systemic effects, general population	0.75 mg/kg bw/day (General Population)
	Long-term - systemic effects, general population	0.75 mg/kg bw/day (General Population)
Dermal	Long-term - systemic effects, worker	8.3 mg/kg bw/day (Worker)
	Acute - systemic effects, general population	3.6 mg/kg (General population)
	Acute - systemic effects, worker	8.3 mg/kg bw/day (Worker)
	Long-term - systemic effects, general population	3.6 mg/kg bw/day (General population)
Inhalative	Long-term - systemic effects, worker	12.3 mg/m ³ (Worker)
	Acute - systemic effects, general population	0.75 mg/m ³ (General Population)
	Acute - systemic effects, worker	12.3 mg/m ³ (Worker)
	Long-term - systemic effects, general population	0.75 mg/m ³ (General Population)
CAS: 26761-45-5 2,3-epoxypropyl neodecanoat		
Oral	Long-term - systemic effects, general population	1.1 mg/kg bw/day (General Population)
Dermal	Long-term - systemic effects, worker	1.4 mg/kg bw/day (Worker)
	Long-term - systemic effects, general population	0.7 mg/kg bw/day (General population)
Inhalative	Long-term - systemic effects, worker	1,965 mg/m ³ (Worker)
	Long-term - systemic effects, general population	1 mg/m ³ (General Population)

· PNECs	
CAS: 25068-38-6 Bisphenol A-(epichlorhydrin); epoxy resin(number average molecular weight<700)	
Aquatic compartment - freshwater	0.003 mg/L (not specified)
Aquatic compartment - marine water	0.0003 mg/L (not specified)
Aquatic compartment - water, intermittent releases	0.013 mg/L (not specified)
Aquatic compartment - sediment in freshwater	0.5 mg/kg sed dw (not specified)
Aquatic compartment - sediment in marine water	0.5 mg/kg sed dw (not specified)
Sewage treatment plant	10 mg/L (not specified)
CAS: 26761-45-5 2,3-epoxypropyl neodecanoat	
Aquatic compartment - freshwater	0.0035 mg/L (not specified)
Aquatic compartment - marine water	0.00035 mg/L (not specified)
Aquatic compartment - water, intermittent releases	0.035 mg/L (not specified)
Sewage treatment plant	50 mg/L (not specified)

· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Avoid contact with the eyes and skin.

· Respiratory protection:



Filter A

· Protection of hands:

- Not required.
- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.12.2021

Version number 10

Revision: 06.12.2021

Trade name: Foster 82-77 comp. A

(Contd. of page 4)

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Recommended thickness of the material: $\geq 0,12$ mm

· **Penetration time of glove material**

> 480 min.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Use protective suit.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Fluid

Colour: Black

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value At 20 °C:** 7

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: >200 °C

· **Flash point:** 126 °C (DIN 53213)

· **Flammability (solid, gas):** Not applicable.

· **Ignition temperature:** >300 °C

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

· **Vapour pressure At 20 °C:** 0.2 hPa

· **Density At 20 °C:** 1.14 g/cm³ (DIN 51757)

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.12.2021

Version number 10

Revision: 06.12.2021

Trade name: Foster 82-77 comp. A

(Contd. of page 5)

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

Dynamic At 20 °C: 90,000 mPas

Kinematic: Not determined.

· **Solvent content:**

Solids content: 98.7 % (DIN 53216)

· **9.2 Other information**

VOC (EU): 0.00 %

VOC (EU): 0.0 g/l

VOCV: 0.00 %

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions** No dangerous reactions known.

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

· **10.6 Hazardous decomposition products:** Carbon monoxide

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

CAS: 25068-38-6 Bisphenol A-(epichlorhydrin); epoxy resin(number average molecular weight<700)

Oral	LD50	>11,400 mg/kg (RAT)
------	------	---------------------

Dermal	LD50	>2,000 mg/kg (RAT)
--------	------	--------------------

	LC50/96 h	1.3 mg/l (Fish)
--	-----------	-----------------

CAS: 26761-45-5 2,3-epoxypropyl neodecanoat

Oral	LD50	>9,700 mg/kg (RAT)
------	------	--------------------

Dermal	LD50	3,800 mg/kg (RAT)
--------	------	-------------------

Inhalative	LC50/4 h	>240 mg/l (RAT)
------------	----------	-----------------

	LC50/96 h	9.6 mg/l (Rainbow trout)
--	-----------	--------------------------

CAS: 107-21-1 Ethane-1,2-diol

Oral	LD50	7,712 mg/kg (rat)
------	------	-------------------

Dermal	LD50	9,530 mg/kg (rbt)
--------	------	-------------------

	LC50/96 h	72,860 mg/l (Fish)
--	-----------	--------------------

· **Primary irritant effect:**

· **Skin corrosion/irritation**

Causes skin irritation.

· **Serious eye damage/irritation**

Causes serious eye irritation.

· **Respiratory or skin sensitisation**

May cause an allergic skin reaction.

· **Additional toxicological information:** No further relevant information available.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.12.2021

Version number 10

Revision: 06.12.2021

Trade name: Foster 82-77 comp. A

(Contd. of page 6)

- **Ingestion:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity**
Suspected of causing genetic defects.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

CAS: 25068-38-6 Bisphenol A-(epichlorhydrin); epoxy resin(number average molecular weight<700)

EC50/48 h 2.1 mg/l (DAPHNIA MAGNA)

CAS: 26761-45-5 2,3-epoxypropyl neodecanoat

EC50/48 h 4.8 mg/l (DAPHNIA MAGNA)

EC50/96 h 3.5 mg/L (ALGAE)

CAS: 107-21-1 Ethane-1,2-diol

EC50/48 h >100 mg/l (DAPHNIA MAGNA)

EC50/96 h 6,500-13,000 mg/L (ALGAE)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

· Ecotoxicological effects:

· **Remark:** Toxic for fish

· Additional ecological information:

· General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

· 12.5 Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Dispose of as dangerous waste.

· Uncleaned packaging:

· **Recommendation:** Disposal must be made according to official regulations.

GB

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.12.2021

Version number 10

Revision: 06.12.2021

Trade name: Foster 82-77 comp. A

(Contd. of page 7)

SECTION 14: Transport information

· 14.1 UN-Number · ADR/RID/ADN, IMDG, IATA	UN3082
· 14.2 UN proper shipping name · ADR/RID/ADN	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, Bisphenol A-(epichlorhydrin); epoxy resin(number average molecular weight<700))
· IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, Bisphenol A-(epichlorhydrin); epoxy resin(number average molecular weight<700)), MARINE POLLUTANT
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, Bisphenol A-(epichlorhydrin); epoxy resin(number average molecular weight<700))
· 14.3 Transport hazard class(es) · ADR/RID/ADN, IMDG, IATA	
	
· Class · Label	9 Miscellaneous dangerous substances and articles. 9
· 14.4 Packing group · ADR/RID/ADN, IMDG, IATA	III
· 14.5 Environmental hazards: · Marine pollutant:	Yes Symbol (fish and tree)
· Special marking (ADR/RID/ADN): · Special marking (IATA):	Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category	Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F A
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	Transport classification ADR/IMGD is based on packaging >30ltr(IMDG), <450ltr(ADR). For other packaging units different classification can apply.
· ADR/RID/ADN · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category · Tunnel restriction code	3 (-)

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.12.2021

Version number 10

Revision: 06.12.2021

Trade name: Foster 82-77 comp. A

(Contd. of page 8)

<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	<p>5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml</p>
<ul style="list-style-type: none"> · UN "Model Regulation": 	<p>UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE, BISPHENOL A-(EPICHLORHYDRIN); EPOXY RESIN(NUMBER AVERAGE MOLECULAR WEIGHT<700)), 9, III</p>

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07 GHS08 GHS09

- **Signal word** Warning
- **Hazard-determining components of labelling:**
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
2,3-epoxypropyl neodecanoat
Bisphenol A-(epichlorhydrin); epoxy resin(number average molecular weight<700)
- **Hazard statements**
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category E2** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **National regulations:**
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.12.2021

Version number 10

Revision: 06.12.2021

Trade name: Foster 82-77 comp. A

(Contd. of page 9)

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H341 Suspected of causing genetic defects.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

· **Department issuing SDS:** Product safety department.

· **Contact:** temati@temati.com

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Muta. 2: Germ cell mutagenicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 11

Revision: 18.02.2022

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

- **1.1 Product identifier**
- **Trade name: Foster 82-77 comp. B**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Epoxy curing agent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
H.B. Fuller, Isar-Rakoll, S.A.
Estrada Nacional 13
PT-4486-851 Mindelo - Vila do Conde
+351 229 288 200
- **EU-MSDS@hbfuller.com**
- **Further information obtainable from:** Regulatory Department
- **1.4 Emergency telephone number:** +44 (0) 1235 239 670 (24 hrs)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Acute Tox. 4 H302 Harmful if swallowed.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05



GHS07



GHS09

- **Signal word** Danger
- **Hazard-determining components of labelling:**
Fatty acids, tall-oil, reaction products with tetraethylenepentamine
3,6,9-triazaundecamethylenediamine
3-aminomethyl-3,5,5-trimethylcyclohexylamine
Benzyl alcohol
3,6-diazaoctanethylenediamin

(Contd. on page 2)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 11

Revision: 18.02.2022

Trade name: Foster 82-77 comp. B

(Contd. of page 1)

Phenol, 4,4'-(1-methylethylidene)bis-,polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine and (chloromethyl)oxirane
m-phenylenebis(methylamine)
Fenol, gestyreneerd

· **Hazard statements**

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with additions.

· **Dangerous components:**

CAS: 68953-36-6 EINECS: 273-201-6	Fatty acids, tall-oil, reaction products with tetraethylenepentamine ☠ Eye Dam. 1, H318; ☠ Aquatic Chronic 2, H411	50-<100%
CAS: 112-57-2 EINECS: 203-986-2	3,6,9-triazaundecamethylenediamine ☠ Skin Corr. 1B, H314; ☠ Eye Dam. 1, H318; ☠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	10-<25%
CAS: 2855-13-2 EINECS: 220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine ☠ Skin Corr. 1B, H314; ☠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	5-<10%
CAS: 100-51-6 EINECS: 202-859-9 Reg.nr.: 01-2119492630-38	Benzyl alcohol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	5-<10%
CAS: 112-24-3 EINECS: 203-950-6	3,6-diazaoctanethylenediamin ☠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	3-<5%
CAS: 38294-64-3	Phenol, 4,4'-(1-methylethylidene)bis-,polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine and (chloromethyl)oxirane ☠ Skin Corr. 1B, H314; ⚠ Skin Sens. 1, H317; Aquatic Chronic 3, H412	3-<5%
CAS: 1477-55-0 EINECS: 216-032-5 Reg.nr.: 01-2119480150-50	m-phenylenebis(methylamine) ☠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1, H317; Aquatic Chronic 3, H412	1-<3%

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 11

Revision: 18.02.2022

Trade name: Foster 82-77 comp. B

(Contd. of page 2)		
CAS: 69-72-7 EINECS: 200-712-3 Reg.nr.: 01-2119486984-17	Salicylic acid --- ☞ Eye Dam. 1, H318; ☞ Acute Tox. 4, H302	I-<3%
CAS: 61788-44-1 EINECS: 262-975-0	Fenol, gestyreneerd --- ☞ Aquatic Chronic 2, H411; ☞ Skin Irrit. 2, H315; Skin Sens. 1, H317	<1%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· **5.2 Special hazards arising from the substance or mixture**

During heating or in case of fire poisonous gases are produced.

· **5.3 Advice for firefighters**

· **Protective equipment:** Mount respiratory protective device.

· **Additional information** Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Avoid contact with skin, eyes and clothes.

· **6.2 Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 11

Revision: 18.02.2022

Trade name: Foster 82-77 comp. B

(Contd. of page 3)

- **6.4 Reference to other sections**
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Use only in well ventilated areas.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Respiratory protection:**



Filter A

- **Protection of hands:**
Not required.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Recommended thickness of the material: $\geq 0,12$ mm
- **Penetration time of glove material**
> 480 min.
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 11

Revision: 18.02.2022

Trade name: Foster 82-77 comp. B

(Contd. of page 4)

· **Eye protection:**

Tightly sealed goggles

· **Body protection:** Use protective suit.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Fluid
· Colour:	Amber coloured
· Odour:	Characteristic
· Odour threshold:	Not determined.

· pH-value At 20 °C:	12 Alkaline
-----------------------------	----------------

· **Change in condition**

· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	205.4 °C

· Flash point:	101 °C (DIN 53213)
-----------------------	--------------------

· Flammability (solid, gas):	Not applicable.
-------------------------------------	-----------------

· Ignition temperature:	435 °C
--------------------------------	--------

· Decomposition temperature:	Not determined.
-------------------------------------	-----------------

· Auto-ignition temperature:	Product is not selfigniting.
-------------------------------------	------------------------------

· Explosive properties:	Product does not present an explosion hazard.
--------------------------------	---

· **Explosion limits:**

· Lower:	1.3 Vol %
· Upper:	13 Vol %

· Vapour pressure At 20 °C:	0 hPa
------------------------------------	-------

· Density At 20 °C:	0.97 g/cm ³ (DIN 51757)
----------------------------	------------------------------------

· Relative density	Not determined.
---------------------------	-----------------

· Vapour density	Not determined.
-------------------------	-----------------

· Evaporation rate	Not determined.
---------------------------	-----------------

· Solubility in / Miscibility with water:	Fully miscible.
--	-----------------

· Partition coefficient: n-octanol/water:	Not determined.
--	-----------------

· **Viscosity:**

· Dynamic:	Not determined.
· Kinematic:	Not determined.

· **Solvent content:**

· Solids content:	≥74- ≤79.3 % (DIN 53216)
--------------------------	--------------------------

· **9.2 Other information**

· VOC (EU):	0.00 %
· VOC (EU):	0.0 g/l

(Contd. on page 6)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 11

Revision: 18.02.2022

Trade name: Foster 82-77 comp. B

(Contd. of page 5)

VOCV: 0.00 %

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity**

Harmful if swallowed.

- **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)

Oral	LD50	1,783 mg/kg
Dermal	LD50	4,597 mg/kg
Inhalative	LC50/4 h	38.3 mg/l

CAS: 100-51-6 Benzyl alcohol

Oral	LD50	1,230 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rbt)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **Additional toxicological information:** No further relevant information available.
- **Ingestion:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 11

Revision: 18.02.2022

Trade name: Foster 82-77 comp. B

(Contd. of page 6)

- **Additional ecological information:**

- **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Dispose of as dangerous waste.

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN-Number**

- **ADR/RID/ADN, IMDG, IATA**

UN1760

- **14.2 UN proper shipping name**

- **ADR/RID/ADN**

1760 CORROSIVE LIQUID, N.O.S.
(TETRAETHYLENEPENTAMINE,
TRIETHYLENETETRAMINE), ENVIRONMENTALLY
HAZARDOUS

- **IMDG**

CORROSIVE LIQUID, N.O.S.
(TETRAETHYLENEPENTAMINE,
TRIETHYLENETETRAMINE), MARINE POLLUTANT

- **IATA**

CORROSIVE LIQUID, N.O.S.
(TETRAETHYLENEPENTAMINE,
TRIETHYLENETETRAMINE)

- **14.3 Transport hazard class(es)**

- **ADR/RID/ADN, IMDG**



- **Class**

8 Corrosive substances.

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31


Printing date 18.02.2022

Version number 11

Revision: 18.02.2022

Trade name: Foster 82-77 comp. B

(Contd. of page 7)

· Label	8
· IATA	
	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	
· ADR/RID/ADN, IMDG, IATA	III
· 14.5 Environmental hazards:	Product contains environmentally hazardous substances: Fatty acids, tall-oil, reaction products with tetraethylenepentamine
· Marine pollutant:	Yes
· Special marking (ADR/RID/ADN):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Hazard identification number (Kemler code):	80
· EMS Number:	F-A,S-B
· Segregation groups	Alkalis
· Stowage Category	A
· Stowage Code	SW2 Clear of living quarters.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	Transport classification ADR/IMDG is based on packaging >30ltr(IMDG), >450ltr(ADR). For other packaging units different classification can apply.
· ADR/RID/ADN	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1760 CORROSIVE LIQUID, N.O.S. (TETRAETHYLENEPENTAMINE, TRIETHYLENETETRAMINE), 8, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

(Contd. on page 9)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 11

Revision: 18.02.2022

Trade name: Foster 82-77 comp. B

(Contd. of page 8)

· **Hazard pictograms**

GHS05 GHS07 GHS09

· **Signal word** *Danger*· **Hazard-determining components of labelling:**

*Fatty acids, tall-oil, reaction products with tetraethylenepentamine
3,6,9-triazaundecamethylenediamine
3-aminomethyl-3,5,5-trimethylcyclohexylamine
Benzyl alcohol
3,6-diazaoctanethylenediamin
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine and
(chloromethyl)oxirane
m-phenylenebis(methylamine)
Fenol, gestyreneerd*

· **Hazard statements**

*H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.*

· **Precautionary statements**

*P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Directive 2012/18/EU**· **Named dangerous substances - ANNEX I** *None of the ingredients is listed.*· **Seveso category E2** *Hazardous to the Aquatic Environment*· **Qualifying quantity (tonnes) for the application of lower-tier requirements** *200 t*· **Qualifying quantity (tonnes) for the application of upper-tier requirements** *500 t*· **National regulations:**· **Waterhazard class:** *Water hazard class 2 (Self-assessment): hazardous for water.*· **15.2 Chemical safety assessment:** *A Chemical Safety Assessment has been carried out.*

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

*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.
H318 Causes serious eye damage.*

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 11

Revision: 18.02.2022

Trade name: Foster 82-77 comp. B

(Contd. of page 9)

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS:** Product safety department.

· **Contact:** SHE@diffutherm.nl

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 7

Revision: 18.02.2022

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

- **1.1 Product identifier**
- **Trade name:** Foster 82-77 comp. C
- **CAS Number:**
14808-60-7
- **EC number:**
238-878-4
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Filler/ Extender
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
H.B. Fuller, Isar-Rakoll, S.A.
Estrada Nacional 13
PT-4486-851 Mindelo - Vila do Conde
+351 229 288 200

EU-MSDS@hbfuller.com
- **Further information obtainable from:** Regulatory Department
- **1.4 Emergency telephone number:** +44 (0) 1235 239 670 (24 hrs)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The substance is not classified, according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
- **CAS No. Description**
CAS: 14808-60-7 Quartz (SiO₂)
- **Identification number(s)**
- **EC number:** 238-878-4

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **After skin contact:** If skin irritation continues, consult a doctor.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 7

Revision: 18.02.2022

Trade name: Foster 82-77 comp. C

(Contd. of page 1)

- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.
- **Additional information** Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
No special measures required.
Use only in well ventilated areas.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Regulatory information**
- **CAS No. Designation of material % Type Value Unit** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**
Not required.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 7

Revision: 18.02.2022

Trade name: Foster 82-77 comp. C

(Contd. of page 2)

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

PVC or PE gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Recommended thickness of the material: $\geq 0,12$ mm

- **Penetration time of glove material**

> 480 min.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Not required.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Powder

Colour: Whitish

- **Odour:** Odourless

- **Odour threshold:** Not determined.

- **pH-value:** 6.5

- **Change in condition**

Melting point/freezing point: $>1,610$ °C

Initial boiling point and boiling range: Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gas):** Product is not flammable.

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Not determined.

- **Explosive properties:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

- **Vapour pressure:** Not applicable.

- **Density At 20 °C:** 2.5 g/cm³ (DIN 51757)

- **Bulk density:** 1,400 kg/m³

- **Relative density** Not determined.

- **Vapour density** Not applicable.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with water:**

Insoluble.

- **Partition coefficient: n-octanol/water:** Not determined.

- **Viscosity:**

Dynamic: Not applicable.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 7

Revision: 18.02.2022

Trade name: Foster 82-77 comp. C

(Contd. of page 3)

Kinematic:	Not applicable.
Solids content:	100.0 % (DIN 53216)
· 9.2 Other information	
VOC (EU):	0.00 %
VOC (EU):	0.0 g/l
VOCV:	0.00 %

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:** No further relevant information available.
- **Ingestion:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

GB

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 7

Revision: 18.02.2022

Trade name: Foster 82-77 comp. C

(Contd. of page 4)

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number · ADR/RID/ADN, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR/RID/ADN, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es) · ADR/RID/ADN, ADN, IMDG, IATA · Class	Void
· 14.4 Packing group · ADR/RID/ADN, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications. Transport classification ADR/IMGD is based on packaging >30ltr(IMDG), >450ltr(ADR). For other packaging units different classification can apply.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Product safety department.

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.02.2022

Version number 7

Revision: 18.02.2022

Trade name: Foster 82-77 comp. C

(Contd. of page 5)

· **Contact:** *temati@temati.com*

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· *** Data compared to the previous version altered.**

GB