according to Regulation (EC) No. 1907/2006

Sigunit®-L93 AF Shotcrete accelerator

Revision Date 31.10.2016 Version 1.0 Print Date 31.1

Version III

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

1.1 Product identifier

Trade name : Sigunit®-L93 AF Shotcrete accelerator

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

Product use : Concrete admixtures

1.3 Details of the supplier of the safety data sheet

Company : Sika Limited

Watchmead

Welwyn Garden City Hertfordshire AL7 1BQ United Kingdom

Telephone : +44 (0)1707 394444

1.4 Emergency telephone number

Emergency telephone num-

: +44 (0)1707 363899 (available during office hours)

bei

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Type of product : Mixture

Classification (REGULATION (EC) No 1272/2008)

Serious eye damage, Category 1 H318: Causes serious eye damage.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

T

Signal word : Danger

Hazard statements : H318 Causes serious eye damage.

Precautionary statements : **Prevention**:

P280 Wear protective gloves/ eye protection/ face

protection.

Response:

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously

according to Regulation (EC) No. 1907/2006

Sigunit®-L93 AF Shotcrete accelerator



Revision Date 31.10.2016

Version 1.0

Print Date 31.10.2016

with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label:

233-135-0 aluminium sulphate

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
aluminium sulphate 10043-01-3 233-135-0 01-2119531538-36-XXXX	Eye Dam.1; H318	>= 50 - <= 100
2,2'-iminodiethanol 111-42-2 203-868-0 01-2119488930-28-XXXX	Acute Tox.4; H302 Skin Irrit.2; H315 Eye Dam.1; H318 STOT RE2; H373 Aquatic Chronic3; H412	>= 1 - < 2,5

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 : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.

Consult a physician after significant exposure.

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

Wash off with soap and plenty of water. If symptoms persist, call a physician.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tis-

according to Regulation (EC) No. 1907/2006

Sigunit®-L93 AF Shotcrete accelerator

Revision Date 31.10.2016 Version 1.0 Print Date 31

sue damage and blindness.

In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

Remove contact lenses.

Keep eye wide open while rinsing.

If swallowed : Do not induce vomiting without medical advice.

Rinse mouth with water.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Excessive lachrymation

See Section 11 for more detailed information on health effects

and symptoms.

Risks : No known significant effects or hazards.

Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

ucts

Hazardous combustion prod- : No hazardous combustion products are known

5.3 Advice for firefighters

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

Further information : Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Deny access to unprotected persons.

according to Regulation (EC) No. 1907/2006

Sigunit®-L93 AF Shotcrete accelerator

Print Date 31 Revision Date 31.10.2016 Version 1.0



6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water

courses.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

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 : Avoid exceeding the given occupational exposure limits (see

section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical products

Advice on protection against

fire and explosion

: Normal measures for preventive fire protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

> practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers

: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accord-

ance with local regulations.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

according to Regulation (EC) No. 1907/2006

Sigunit®-L93 AF Shotcrete accelerator

Revision Date 31.10.2016 Version 1.0 Print Date 31



Components	CAS-No.	Value	Control parame- ters *	Basis *
aluminium sulphate	10043-01-3	TWA	2 mg/m3	GB EH40

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Eye wash bottle with pure water

Hand protection : Chemical-resistant, impervious gloves complying with an ap-

proved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manu-

facturer specifications.

Suitable for short time use or protection against splashes:

Butyl rubber/nitrile rubber gloves (0,4 mm), Contaminated gloves should be removed.

Suitable for permanent exposure:

Viton gloves (0.4 mm), breakthrough time >30 min.

Skin and body protection : Protective clothing (e.g. Safety shoes acc. to EN ISO 20345,

long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing

and stirring work.

Respiratory protection : Respirator selection must be based on known or anticipated

exposure levels, the hazards of the product and the safe work-

ing limits of the selected respirator.

organic vapor filter (Type A)

A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm Ensure adequate ventilation. This can be achieved by local exhaust extraction or by general ventilation. (EN 689 - Methods for determining inhalation exposure). This applies in particular to the mixing / stirring area. In case this is not sufficent to keep the concentrations under the occupational exposure

limits then respiration protection measures must be used.

Environmental exposure controls

General advice : Try to prevent the material from entering drains or water

courses.

according to Regulation (EC) No. 1907/2006

Sigunit®-L93 AF Shotcrete accelerator

Revision Date 31.10.2016 Version 1.0



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid
Colour : white

Odour : odourless

Odour Threshold : No data available

Flash point : Not applicable

Autoignition temperature : No data available

Decomposition temperature : No data available

Lower explosion limit (Vol-%) : No data available

Upper explosion limit (Vol-%) : No data available

Flammability : No data available

Explosive properties : No data available

Oxidizing properties : No data available

pH : > 3,0

Melting point/range / Freez-

ing point

: No data available

Boiling point/boiling range : No data available

Vapour pressure : 23 hPa

Density : ca.1,45 g/cm3

at 20 °C

Water solubility : No data available

Partition coefficient: n-

octanol/water

: No data available

Viscosity, dynamic : No data available

Viscosity, kinematic : > 7 mm2/s

at 40 °C

Relative vapour density : No data available

Evaporation rate : No data available

according to Regulation (EC) No. 1907/2006

Sigunit®-L93 AF Shotcrete accelerator

Revision Date 31.10.2016



9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

Version 1.0

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.

Components:

2,2'-iminodiethanol:

Acute oral toxicity : Acute toxicity estimate: 500 mg/kg

Method: Converted acute toxicity point estimate

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

according to Regulation (EC) No. 1907/2006

Sigunit®-L93 AF Shotcrete accelerator

Revision Date 31.10.2016 Version 1.0



Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12: Ecological information

12.1 Toxicity

Components:

2,2'-iminodiethanol:

aquatic invertebrates

Toxicity to daphnia and other : EC50: 55 mg/l, 48 h, Daphnia magna (Water flea)

: EC50: 75 mg/l, 72 h, Pseudokirchneriella subcapitata (green Toxicity to algae

algae)

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher...

12.6 Other adverse effects

Product:

mation

Additional ecological infor- : There is no data available for this product.

according to Regulation (EC) No. 1907/2006

Sigunit®-L93 AF Shotcrete accelerator

Revision Date 31.10.2016 Version 1.0 Print



SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The generation of waste should be avoided or minimized

wherever possible.

Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe

way.

Dispose of surplus and non-recyclable products via a licensed

waste disposal contractor.

Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional legislation are supports.

local authority requirements.

Avoid dispersal of spilled material and runoff and contact with

soil, waterways, drains and sewers.

European Waste Catalogue : 16 10 01* aqueous liquid wastes containing dangerous sub-

stances

Contaminated packaging : 15 01 10* packaging containing residues of or contaminated

by dangerous substances

SECTION 14: Transport information

ADR

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

14.6 Special precautions for user

No data available

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

Not applicable

SECTION 15: Regulatory information

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

Prohibition/Restriction

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

preparations and articles (Annex XVII)

: Not applicable

according to Regulation (EC) No. 1907/2006

Sigunit®-L93 AF Shotcrete accelerator

Revision Date 31.10.2016 Version 1.0 Print Date 31.10.2016

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

: None of the components are listed

(=> 0.1 %).

REACH - List of substances subject to authorisation : Not applicable

(Annex XIV)

REACH Information: All substances contained in our Products are

- preregistered or registered by our upstream suppliers, and/or

preregistered or registered by us, and/or
excluded from the regulation, and/or
exempted from the registration.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

VOC-CH (VOCV) : no VOC duties

VOC-EU (solvent) : 1,79 %

If other regulatory information applies that is not already provided elsewhere in the Safety Data Sheet, then it is described in this subsection.

Health, safety and environmental regulation/legislation specific for the substance or mixture: : The Chemicals (Hazard Information and Packaging for Sup-

ply) Regulations 2002

Control of Substances Hazardous to Health Regulations 2002 The Management of Health and Safety at Work Regulations

1999

Health and Safety at Work Act 1974

Environmental Protection Act 1990 & Subsidiary Regulations

15.2 Chemical safety assessment

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Full text of H-Statements

H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.

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

H412 Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. Acute toxicity

Aquatic Chronic Chronic aquatic toxicity Eye Dam. Chronic aquatic toxicity Serious eye damage

according to Regulation (EC) No. 1907/2006

Sigunit®-L93 AF Shotcrete accelerator

Revision Date 31.10.2016 Version 1.0



Skin Irrit. Skin irritation

STOT RE Specific target organ toxicity - repeated exposure

ADR Accord européen relatif au transport international des marchandises

Dangereuses par Route

CAS Chemical Abstracts Service DNEL Derived no-effect level

EC50 Half maximal effective concentration

GHS Globally Harmonized System

IATA International Air Transport Association

IMDG International Maritime Code for Dangerous Goods

LD50 Median lethal dosis (the amount of a material, given all at once, which

causes the death of 50% (one half) of a group of test animals)

LC50 Median lethal concentration (concentrations of the chemical in air that

kills 50% of the test animals during the observation period)

MARPOL International Convention for the Prevention of Pollution from Ships,

1973 as modified by the Protocol of 1978

OEL Occupational Exposure Limit

PBT Persistent, bioaccumulative and toxic PNEC Predicted no effect concentration

REACH Regulation (EC) No 1907/2006 of the European Parliament and of the

Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a

European Chemicals Agency

SVHC Substances of Very High Concern

vPvB Very persistent and very bioaccumulative

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

Changes as compared to previous version!