

**Safety Data Sheet
for coated, bonded, nonwoven and foam abrasives**

1. Identification of the product and the company / undertaking

1.1 Product identifier

1948 siaflex

Grit range: 40 to 1500

Reverse side: fast

1.2 Use of product

Recommended use: Coated abrasives on backing for grinding/ sanding of different materials.

1.3 Details of the supplier of the safety data sheet information:

Company: sia Abrasives, Inc. USA
1980 Indian Creek Road
Address: Lincolnton, NC 28092
USA

E-mail: msds.ch@sia-abrasives.com

2. Hazards identification

2.1. Classification

Not applicable

Abrasives are articles and not dangerous substances or mixtures according to Regulation (EC) N° 1272/2008.
See also section 8 and 16.

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Abrasives are articles and not dangerous substances or mixtures and therefore no labelling is required according to Regulation (EC) N° 1272/2008.

Signal word: Not applicable
Symbols: Not applicable
Pictograms: ☒ Not applicable
Notes to Physician: Not applicable

2.3. Other hazards

Not known.

3. Composition/information on ingredients

The product contains the following ingredients which are classified according to Regulation (EC) Nr. 1272/2008 or for which a community occupational exposure limit value exists:

Substance	EC-N° (if available)	CAS-N° (if available)	REACH Reg. N° (if available)	Conc. (%)	Classification acc. to Regulation (EC) N° 1272/2008	
					Hazard classes / hazard categories	Hazard statements
Aluminum Oxide	215-691-6	1344-28-1	215-691-6	10 - 50	Not classified	
Calcium Carbonate		471-34-1		0.8 - 1.4	Not classified	
Iron Oxide, Dust & Fume, as Fe		1309-37-1	215-168-2	0 - 1.2	Not classified	
Kaolin		1332-58-7		0 - 5	Not classified	
Monoethylene Glycol		107-21-1	203-473-3	0 - 0.3	Acute tox. 4	H302
Organic Colors				0 - 0.1	Not classified	
Polyurethane binder		mixture		2.9 - 8.3	Not classified	
Titanium Dioxide		13463-67-7	236-675-5	0.5 - 2.6	Not classified	
Backing		mixture		19 - 45	Not classified	
Nitrile Rubber		mixture		5 - 13	Not classified	
Nylon Fibre		mixture		10 - 30	Not classified	
cured resin				4.8 - 16.8		
Formaldehyde				0%		

(for full text of H-phrases see section 16)

Remark No PDMS (silicone-oils) present in this product

4. First aid measures

See also section 8 and 16

4.1. Description of first aid measures

Inhalation	Not possible, due to the form of the product. If dust is inhaled, move person to fresh air. If breathing is difficult, have qualified personnel administer oxygen. Seek medical attention if irritation or other symptoms persist.
Eye contact	Remove contact lenses if present and easy to do so. Flush eyes thoroughly with large amounts of water, holding eyelids open. If irritation persists, seek medical attention.
Skin contact	Wash skin with soap and water. If irritation or other symptoms develop, seek medical attention. sist.
Ingestion	Not likely, due to the form of the product. In the event of, do not induce vomiting. Rinse mouth with water. Seek medical attention if a large amount is swallowed or if you feel unwell..

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

Not known, but dust may cause eye and respiratory irritation. Prolonged inhalation of high concentration of dust may cause adverse effects on the lungs.

See Section 11.1. Information on toxicological effects.

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

Not relevant. Treat symptomatically. Immediate medical attention should not be required.

5. Fire fighting measures

5.1. Suitable (and unsuitable) extinguishing media:

In case of fire: Use a fire fighting agent suitable for ordinary combustible material and appropriate for surrounding area such as: water, foam, sand, powder or CO₂

5.2. Special hazards arising from the product

Toxic fumes (CO, CO₂, NO_x, HCN, aldehydes, including CH₂O) may occur. Particulate matter and other organic compounds may be formed during combustion. Use respiratory protective equipment.

5.3. Special protective equipment and precautions for fire-fighters

Extinguishing materials should be selected according to the surrounding area.

Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus.

6. Accidental release measures

6.1. Personal precautions, protective equipment, and emergency procedures

Wear appropriate respirator and protective clothing as needed to avoid eye contact and inhalation of dust.

6.2. Environmental precautions

Avoid contamination of water supplies and environmental releases. Report spills as required to authorities.

6.3. Methods and materials for containment and cleaning up

Carefully collect dry material, avoiding the creation of airborne dust. Place in a suitable container for disposal.

7. Handling and storage

Follow instructions of grinding machine manufacturers and the relevant national regulations. In addition, observe the safety recommendations of the manufacturer.

7.1. Precautions for safe handling

Avoid breathing dust. Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wear suitable gloves, eye protection and appropriate protective clothing according to the operation. Wash thoroughly after handling. Consider potential exposure to components of the materials or coatings being processed. Refer to OSHA's substance specific standards for additional work practice requirements where applicable.

Combustible dust could be generated during the normal use of this product. The dust could be explosive if in sufficient concentration with an ignition source.

Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions

7.2. Conditions for safe storage, including any incompatibilities

No special storage required.

8. Exposure controls/personal protection

8.1. Control parameters

accordingly: Before grinding it is recommended to perform a risk assessment and to use personal protection equipment

Note: Consider also components of base materials and coatings being processed.

Hazardous dust of the workpiece material may be generated during grinding and/or sanding operations. National regulations for dust exposure limit values have to be taken into consideration.

Occupational exposure limit values and/or biological limit values

Substance	EC-No (if avail.)	CAS-No (if avail.)	Limit value type (Country of origin)	Occupational limit value / PEL				Peak limit	Source
				Long term / TWA		Short term / STEL			
				mg/m3	ml/m3 (ppm)	mg/m3	ml/m3 (ppm)		
Aluminum Oxide	215-691-6	1344-28-1	Switzerland	3 a	NA	NA	NA	10 mg/m3	GESTIS
			Europa (GER)	1.25a 4e	NA	NA	NA	10 mg/m3	GESTIS
			USA	NA	NA	NA	15 mg/m3	GESTIS	
Calcium Carbonate		471-34-1	Switzerland	3 a	NA	NA	NA	10 mg/m3	GESTIS
			Europa (GER)	NA	NA	NA	NA	NA	GESTIS
			USA	5 a	NA	NA	NA	15 TD mg/m3	GESTIS
Carbon Black		1333-86-4	Switzerland	NA	NA	NA	NA	NA	GESTIS
			Europa (GER)	NA	NA	NA	NA	NA	GESTIS
			USA	NA	NA	NA	NA	3,5 mg/m3	GESTIS
Iron Oxide, Dust & Fume, as F		1309-37-1	Switzerland	3 a	NA	NA	NA	10 mg/m3	GESTIS
			Europa (GER)	NA	NA	NA	NA	NA	GESTIS
			USA	10	NA	NA	NA	NA	GESTIS
Monoethylene Glycol		107-21-1	Switzerland	NA	NA	NA	NA	NA	GESTIS
			Europa (GER)	NA	NA	NA	NA	NA	GESTIS
			USA	NA	NA	NA	NA	NA	GESTIS
Phenolic Resin (cured)		mixture	Switzerland	NA	NA	NA	NA	NA	GESTIS
			Europa (GER)	NA	NA	NA	NA	NA	GESTIS
			USA	NA	NA	NA	NA	NA	GESTIS
Polyurethane binder		mixture	Switzerland	NA	NA	NA	NA	NA	GESTIS
			Europa (GER)	NA	NA	NA	NA	NA	GESTIS
			USA	NA	NA	NA	NA	NA	GESTIS
Backing		mixture	Switzerland	NA	NA	NA	NA	NA	GESTIS
			Europa (GER)	NA	NA	NA	NA	NA	GESTIS
			USA	NA	NA	NA	NA	NA	GESTIS
Nylon Fibre		mixture	Switzerland	NA	NA	NA	NA	NA	GESTIS
			Europa (GER)	NA	NA	NA	NA	NA	GESTIS
			USA	NA	NA	NA	NA	NA	GESTIS
Formaldehyd		50-00-0	Switzerland	0.3	0.37	0.6	0.74	NA	GESTIS
			Europa (GER)	0.3	0.37	0.6	0.74	NA	GESTIS
			USA	0.75	NA	NA	2	NA	GESTIS

Abbreviation:
e: inhalable / einatembar
a: respirable / alveolengängig
NA: not applicable / nicht zutreffend

EUROPE:

Longterm: The employee's average airborne exposure in any 8-hour work shift of a 42-hour work week which shall not be exceeded.

Shortterm: Maximum exposure of four 15min periods per 8 hour shift, with at least 60 minutes between exposure periods

USA:

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PEL: Permitted Exposure Limits

TWA: The employee's average airborne exposure in any 8-hour work shift of a 40-hour work week which shall not be exceeded.

STEL: Maximum exposure of four 15min periods per 8 hour shift, with at least 60 minutes between exposure periods

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

8.2.2. Personal Protective Equipment

8.2.1.1. Respiratory protection

Use respiratory protective equipment, type depends on specific application and material being ground. Consider the potential for exposure to components of the coatings or base material being processed in selecting proper respiratory protection. Refer to OSHA's specific standards for lead, cadmium, etc. where appropriate. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134 and ANSI Z88.2 or other applicable regulations and standards and good Industrial Hygiene practice.

8.2.1.2. Hand protection

Wear protective gloves to avoid skin abrasion when handling type depends on specific application and material being ground.

8.2.1.3. Eye protection

Wear protective goggles with side shields or face shield type depends on specific application and material being ground. To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations. Select and use eye/face protection to prevent contact based on the results of an exposure assessment.

8.2.1.4. Hearing protection

Use hearing protection type depends on specific application and material being ground.

8.2.1.5. Body protection

Use protective clothing type depends on specific application and material being ground.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

General Physical Form	Solid
Product Appearance	Abrasive Product
Grade	40-1500
Color	blue
Odor	Pas d'odeur / bleu /
Odor Threshold	Not applicable
pH	Not applicable
Melting point	Not applicable
Boiling point	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammable Limits (LEL)	Not applicable
Flammable Limits (UEL)	Not applicable
Vapor density	Not applicable
Specific gravity	Not applicable
Solubility in Water	Not applicable
Solubility non Water	Not applicable
Partition coefficient: n-octanol / water	Not applicable
Autoignition temperature	Not applicable
Decomposition temperature	Not applicable
Viscosity	Not applicable

9.2. Other information

None

10. Stability and reactivity

10.1. Reactivity

Product is stable when handled or stored correctly

10.2. Chemical stability

No decomposition in normal use.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Product is stable when handled or stored correctly. ☒

10.5. Incompatible materials

No dangerous reactions known.

10.6. Hazardous decomposition products

None known. At temperatures exceeding 250° C hazardous or toxic decomposition products may be generated – see section 5.2

11. Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on acute effects of exposure

11.1.1. Inhalation

Breathing dust may cause irritation to the nose, throat and upper respiratory tract.

11.1.2. Skin Contact

May cause abrasive skin irritation.

11.1.3. Eye Contact

May cause abrasive irritation and injury.

11.1.3. Ingestion

Not toxic. Swallowing may cause gastrointestinal disturbances.

11.1.4. Chronic Health Effects

Prolonged inhalation of respirable dust may cause adverse lung effects. Most of the dust generated during abrasive processes is from the base material being processed and the potential hazard from this exposure must be evaluated.

11.1.5. Sensitization

Aluminium oxide was negative in a sensitization studies in guinea pigs.

11.1.6. Germ Cell Mutagenicity

This product is not expected to present a risk of genetic damage. Negative in a bacterial recombination assay.

11.1.7. Reproductive Toxicity

Substance	CAS-No	Conc. (%)	Department
Monoethylene Glycol	107-21-1	0 - 0.3	OEHHA

11.1.8. Carcinogenicity

Substance	CAS-No	Conc. (%)	Department
Titanium Dioxide	13463-67-7	0.5 - 2.6	OEHHA

11.1.9. Acute toxicity values

No specific data is available; however, this product is not expected to present a risk of adverse acute toxicity.

ATE = acute toxicity estimated

12. Ecological information

No adverse effects on aquatic organisms are expected. However, consideration must be given to potential environment effects of the base material being processed.

12.1. Toxicity

No effects known.

12.2. Persistence and degradability

No biodegradable potentials known.

12.3. Bioaccumulative potential

No potentials known.

12.4. Mobility in soil

No potentials known.

12.5. Results of PBT and vPvB assessment

Not relevant.

12.6. Other adverse effects

No effects known.valuated.

13. Disposal considerations

13.1. Waste treatment methods

Dispose in accordance with all local, state and national regulations. Local regulations may be more stringent than regional and national requirements. It is the responsibility of the waste generator to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.

13.1.2. Product

Follow national and regional regulations.

Due to the ingredients and properties disposal as non hazardous waste (2000/532/EC) is possible if no hazardous materials are added to the abrasives. (EWC – Nr. 120121),

13.1.3. Packing

Follow national and regional regulations.

14. Transport information

The product is not covered by international regulation on the transport of dangerous goods.

	UN Number	Proper shipping name	Hazard class	Packing Group	Environmental Hazard
DOT	None	Not regulated	None	None	
TDG	None	Not regulated	None	None	

14.1. Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

Not determined.

14.2. Special precautions

None identified.

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the product

15.1.2. European Regulation

No specific labelling requirements under respective EC directives.

15.1.3. US Federal Regulations

Contact "sia abrasives Ind. AG" for more information.

15.1.3.1 CERCLA Hazardous Substances (Section 103)/RQ:

This product is not subject to CERCLA release reporting. Many states have more stringent spill reporting requirements. Report spills in accordance with all applicable regulations.

15.1.3.2. SARA Hazard Category (311/312)

This product is not subject to CERCLA release reporting. Many states have more stringent spill reporting requirements. Report spills in accordance with all applicable regulations.

Fire Hazard	No
Sudden Release of Pressure	No
Reactivity	No
Acute Health	No
Chronic Health	No

15.1.3.3. EPA SARA 313

This product contains the following chemicals regulated under SARA Title III, section 313

Substance	CAS-No	Conc. (%)
Aluminum Oxide	1344-28-1	10 - 50

15.1.3.4. California Proposition 65

Some dust created by using abrasive products contains chemicals listed by the California Office of Environmental Health Hazard Assessment (OEHHA) as causing cancer and reproductive harm. This product is known to contain the following chemicals which are listed by OEHHA as causing cancer and/or reproductive harm.



Substance	CAS-No	Conc. (%)
Monoethylene Glycol	107-21-1	0 - 0.3
Titanium Dioxide	13463-67-7	0.5 - 2.6

15.1.3.5. EPA TSCA Inventory

All of the components of this product are listed on the TSCA inventory.

15.2. Chemical safety assessment

Not relevant.

16. Other information

NFPA RATING (NFPA 704)	FIRE	0	HEALTH	1	INSTABILITY	0
HMIS RATING	FIRE	0	HEALTH	1	PHYSICAL HAZARD	0

16.1. Changes to the previous versions

See sections 1 to 16.

16.2. Literature and data sources

REACH Regulation (EC) Nr. 1907/2006
Regulation (EC) N° 1272/2008
Directive 98/24/EC
Directive 2000/39/EC
Directive 75/324/EEC
Decision 2000/532/EC
Transport regulations according to ADR, RID und IATA.
OEHHA / California Proposition 65
OSHA / HCS [2012]
OSHA / Hazard Communication Standard, 29 CFR 1910.1200
CCOHS / WHMIS [2015]

16.3. Hazard statements referred to in section 2 and 3

H302 Harmful if swallowed.

According to Regulation (EC) N° 1272/2008:

The above information is based on our current standard of knowledge and does not constitute any warranty of conditions of the product and shall be used only as a guide. The information does not form part of any contractual agreement and relates only to the product designated herein and does not relate to its use in combination with any other material or process. It remains the user's responsibility to adhere existing laws and regulations.

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