

**Section 1: Identification of the substance/mixture and of the company/undertaking****Product identifier****Trade name or designation of the mixture** BROWN FUSED ALUMINUM OXIDE**Registration number** 01-2119529248-35-0141**Synonyms** ALOCAL, ALOMAX, ALOTAB, AR, BT, BTCAL, MAXCAL, SFAR, SFARHT, SFCW, TB, SFARBF, BTBF**Date of first issue** 01-February-2012**Version number** 01**Revision date** -**Supersedes date** -**Relevant identified uses of the substance or mixture and uses advised against****Identified uses** Abrasives, Ceramics, Flooring, Surface Treatment and Refractory.**Uses advised against** -**Details of the supplier of the safety data sheet****Company identification** ELFUSA GERAL DE ELETROFUSÃO LTDA  
501, Julio Michelazzo,  
São João da Boa Vista, São Paulo – Brazil ZIP CODE 13872-900**Telephone** +55.19.3634.2300**Person responsible for the MSDS** qualidade@elfusa.com.br**Commercial** comercial@elfusa.com.br**Homepage** www.elfusa.com.br**Person Responsible for commercial introduction of the substance within European Community**

Elfusa Trading SL.

Mijas

Malaga – Spain

**Contact** Mr. Ruben Sinato**Telephone** +55.11.9973.8421**e-mail** ruben.sinato@grupocurimbaba.com.br**Emergency telephone** 1-760-476-3961

Access Code: 333691

**Section 2: Hazards identification****Classification of the substance or mixture****Classification according to Directive 67/548/EEC or 1999/45/EC as amended**

This substance does not meet the criteria for classification according to Directive 67/548/EEC as amended.

**Classification according to Regulation (EC) No 1272/2008 as amended**

This substance does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

**Hazard summary****Physical hazards** Not classified for physical hazards.**Health hazards** Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.**Environmental hazards** Not classified for hazards to the environment.**Specific hazards** Dust may cause eye, skin and respiratory tract irritation. Prolonged and repeated overexposure to dust can lead to pneumoconiosis.**Main symptoms** Irritation of eyes and mucous membranes. Irritation of nose and throat.**Label elements****Label according to Regulation (EC) No. 1272/2008 as amended****Hazard statements** The mixture does not meet the criteria for classification.

## Precautionary statements

<b>Prevention</b>	Observe good industrial hygiene practices.
<b>Response</b>	Wash hands after handling.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.

**Supplemental label information** None.

**Other hazards** Not a PBT or vPvB substance or mixture.

## Section 3: Composition/information on ingredients

### Mixture

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Aluminium oxide	≥ 92	1344-28-1 215-691-6	01-2119529248-35-0141	-	#
<b>Classification:</b>	<b>DSD:</b> -				
	<b>CLP:</b> -				
Impurities: SiO <sub>2</sub> +Fe <sub>2</sub> O <sub>3</sub> +Na <sub>2</sub> O+CaO+MgO+TiO <sub>2</sub>	≤ 8	N/A -	-	-	
<b>Classification:</b>	<b>DSD:</b> -				
	<b>CLP:</b> -				

#: This substance has workplace exposure limit(s).

**Composition comments** This product is registered under the REACH Regulation 1907/2006 as a mono-constituent substance. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. For more detailed chemical composition, refer to the certificate of analysis.

## Section 4: First aid measures

**General information** Get medical attention if any discomfort develops.

#### Description of first aid measures

<b>Inhalation</b>	Move to fresh air. Get medical attention if any discomfort continues.
<b>Skin contact</b>	Wash with soap and water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Flush eyes thoroughly with water for at least 15 minutes. Get medical attention if irritation develops or persists.
<b>Ingestion</b>	Immediately rinse mouth and drink plenty of water. Get medical attention if irritation develops and persists.

**Most important symptoms and effects, both acute and delayed** Irritation of eyes and mucous membranes. Irritation of nose and throat.

**Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

## Section 5: Firefighting measures

**General fire hazards** The product is not flammable.

#### Extinguishing media

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	No restrictions known.

**Special hazards arising from the substance or mixture** None known.

#### Advice for firefighters

<b>Special protective equipment for firefighters</b>	Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.
<b>Special firefighting procedures</b>	Move containers from fire area if you can do it without risk.

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Ensure adequate ventilation. Avoid inhalation of dust and contact with skin and eyes. Wear protective clothing as described in section 8 of this safety data sheet.

**For emergency responders** Wear protective clothing as described in Section 8 of this safety data sheet.

**Environmental precautions** Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

**Methods and material for containment and cleaning up** Recover and recycle, if practical. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not vacuum clean unless vacuum cleaners are equipped with HEPA filter.

**Reference to other sections** For personal protection, see section 8. For waste disposal, see section 13.

## Section 7: Handling and storage

**Precautions for safe handling** Provide adequate ventilation. Use work methods which minimise dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Do not add wet alumina to electrolysis cells. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store in a dry place.

**Specific end use(s)** For detailed information, see section 15. Recommendations given in the exposure scenario for the uses are distributed and annexed as separate documents to this eSDS.

## Section 8: Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

##### Austria. MAK List

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	MAK	5 mg/m <sup>3</sup>	Respirable fume.
	STEL	5 mg/m <sup>3</sup>	Respirable fraction.
10 mg/m <sup>3</sup>		Inhalable fraction.	
20 mg/m <sup>3</sup>		Inhalable fraction.	
10 mg/m <sup>3</sup>		Respirable fume.	

Components	Type	Value	Form
Aluminium oxide (1344-28-1)	MAK	5 mg/m <sup>3</sup>	Respirable fume.
	STEL	5 mg/m <sup>3</sup>	Respirable fraction.
10 mg/m <sup>3</sup>		Inhalable fraction.	
20 mg/m <sup>3</sup>		Inhalable fraction.	
10 mg/m <sup>3</sup>		Respirable fume.	

##### Belgium. Exposure Limit Values.

Material	Type	Value
Aluminium oxide (1344-28-1)	TWA	10 mg/m <sup>3</sup>

Components	Type	Value
Aluminium oxide (1344-28-1)	TWA	10 mg/m <sup>3</sup>

##### Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	10 mg/m <sup>3</sup>	Dust.

Components	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	1,5 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Dust.
		1,5 mg/m <sup>3</sup>	Respirable fraction.

##### Czech Republic. OELs. Government Decree 361

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	0,1 mg/m <sup>3</sup>	Respirable dust.

Components	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	0,1 mg/m <sup>3</sup>	Respirable dust.

**Denmark. Exposure Limit Values**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TLV	5 mg/m3	Total
		2 mg/m3	Respirable.
Components	Type	Value	Form
Aluminium oxide (1344-28-1)	TLV	5 mg/m3	Total
		2 mg/m3	Respirable.

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Total dust.
Components	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Total dust.

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

Material	Type	Value
Aluminium oxide (1344-28-1)	VME	10 mg/m3
Components	Type	Value
Aluminium oxide (1344-28-1)	VME	10 mg/m3

**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	4 mg/m3	Inhalable dust.
		1,5 mg/m3	Respirable dust.
Components	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	4 mg/m3	Inhalable dust.
		1,5 mg/m3	Respirable dust.

**Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	AGW	3 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.
Components	Type	Value	Form
Aluminium oxide (1344-28-1)	AGW	3 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.

**Greece. OELs (Decree No. 90/1999, as amended)**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	5 mg/m3	Inhalable
		10 mg/m3	Respirable.
Components	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	5 mg/m3	Inhalable
		10 mg/m3	Respirable.

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	6 mg/m3	Respirable.
Components	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	6 mg/m3	Respirable.

**Iceland. OELs. Regulation 154/1999 on occupational exposure limits**

Material	Type	Value
Aluminium oxide (1344-28-1)	TWA	10 mg/m3

**Iceland. OELs. Regulation 154/1999 on occupational exposure limits**

Components	Type	Value
Aluminium oxide (1344-28-1)	TWA	10 mg/m3

**Ireland. Occupational Exposure Limits**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	4 mg/m3	Respirable dust.

Components	Type	Value	Form
		10 mg/m3	Total inhalable dust.

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	4 mg/m3	Respirable dust.

		10 mg/m3	Total inhalable dust.
--	--	----------	-----------------------

**Italy. OELs**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	1 mg/m3	Respirable fraction.

Components	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	1 mg/m3	Respirable fraction.

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	6 mg/m3	Decomposition aerosol.

Components	Type	Value	Form
		4 mg/m3	

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	6 mg/m3	Decomposition aerosol.

		4 mg/m3	
--	--	---------	--

**Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	5 mg/m3	Inhalable fraction.

Components	Type	Value	Form
		2 mg/m3	Respirable fraction.

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	5 mg/m3	Inhalable fraction.

		2 mg/m3	Respirable fraction.
--	--	---------	----------------------

**Norway. Administrative Norms for Contaminants in the Workplace**

Material	Type	Value
Aluminium oxide (1344-28-1)	TLV	10 mg/m3

Components	Type	Value
Aluminium oxide (1344-28-1)	TLV	10 mg/m3

**Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	2,5 mg/m3	Fume, total dust.

		1,2 mg/m3	Respirable dust and/or fume.
--	--	-----------	------------------------------

Components	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	2,5 mg/m3	Fume, total dust.

		1,2 mg/m3	Respirable dust and/or fume.
--	--	-----------	------------------------------

**Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)**

Material	Type	Value
Aluminium oxide (1344-28-1)	TWA	10 mg/m3

Components	Type	Value
Aluminium oxide (1344-28-1)	TWA	10 mg/m3

**Romania. OELs. Protection of workers from exposure to chemical agents at the workplace**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	STEL	5 mg/m3	Aerosol
	TWA	1,2 ppm	Aerosol
		2 mg/m3	Aerosol
		0,5 ppm	Aerosol
Components	Type	Value	Form
Aluminium oxide (1344-28-1)	STEL	5 mg/m3	Aerosol
	TWA	1,2 ppm	Aerosol
		2 mg/m3	Aerosol
		0,5 ppm	Aerosol

**Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	4 mg/m3	Inhalable fraction.
		1,5 mg/m3	Respirable fraction.
		0,1 mg/m3	
Components	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	4 mg/m3	Inhalable fraction.
		1,5 mg/m3	Respirable fraction.
		0,1 mg/m3	

**Spain. Occupational Exposure Limits**

Material	Type	Value
Aluminium oxide (1344-28-1)	TWA	10 mg/m3
Components	Type	Value
Aluminium oxide (1344-28-1)	TWA	10 mg/m3

**Sweden. Occupational Exposure Limit Values**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	5 mg/m3	Total dust.
		2 mg/m3	Respirable dust.
Components	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	5 mg/m3	Total dust.
		2 mg/m3	Respirable dust.

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	STEL	24 mg/m3	Fume and respirable dust.
	TWA	3 mg/m3	Respirable dust.
		3 mg/m3	Fume and respirable dust.
Components	Type	Value	Form
Aluminium oxide (1344-28-1)	STEL	24 mg/m3	Fume and respirable dust.
	TWA	3 mg/m3	Respirable dust.
		3 mg/m3	Fume and respirable dust.

**UK. EH40 Workplace Exposure Limits (WELs)**

Material	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.
Components	Type	Value	Form
Aluminium oxide (1344-28-1)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.

**Recommended monitoring procedures** Follow standard monitoring procedures.

## DNEL

Material	Type	Route	Value	Form
Aluminium oxide (1344-28-1)	Workers	Oral	3,29 mg/kg/day	Long term exposure systemic effects
		Inhalation	15,63 mg/m3	Long term exposure local effects
Components	Type	Route	Value	Form
Aluminium oxide (1344-28-1)	Workers	Oral	3,29 mg/kg/day	Long term exposure systemic effects
		Inhalation	15,63 mg/m3	Long term exposure local effects

## PNEC

Material	Type	Route	Value
Aluminium oxide (1344-28-1)	Aqua (freshwater)	Not applicable	79,4 µg/l
	Sewage Treatment Plant	Not applicable	20 mg/l
Components	Type	Route	Value
Aluminium oxide (1344-28-1)	Aqua (freshwater)	Not applicable	79,4 µg/l
	Sewage Treatment Plant	Not applicable	20 mg/l

## Exposure controls

### Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL (occupational exposure limit), suitable respiratory protection must be worn.

### Individual protection measures, such as personal protective equipment

#### General information

Use personal protective equipment as required. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

#### Eye/face protection

Wear goggles/face shield.

#### Skin protection

##### - Hand protection

Wear protective gloves. Suitable gloves can be recommended by the glove supplier.

##### - Other

Wear suitable protective clothing.

#### Respiratory protection

In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter (type P2). Seek advice from local supervisor.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

## Hygiene measures

Wash hands after handling. Routinely wash work clothing and protective equipment to remove contaminants. Handle in accordance with good industrial hygiene and safety practices. Follow up on any medical surveillance requirements.

## Environmental exposure controls

Contain spills and prevent releases and observe national regulations on emissions.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

Appearance	Brown and gray powder.
Physical state	Solid.
Form	Powder.
Colour	Brown and gray.
Odour	Odourless.
Odour threshold	Not available.
pH	Not applicable.
Melting point/freezing point	2040 °C (3704 °F)
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	Not applicable.
Auto-ignition temperature	Not applicable.
Flammability (solid, gas)	Non flammable.
Flammability limit - lower (%)	Not available.

<b>Flammability limit - upper (%)</b>	Not available.
<b>Oxidising properties</b>	Not oxidizing.
<b>Explosive properties</b>	Not explosive.
<b>Explosive limit</b>	Not applicable.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Relative density</b>	3,97 at 20 °C
<b>Solubility (water)</b>	Insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not applicable.
<b>Decomposition temperature</b>	Not available.
<b>Bulk density</b>	Not applicable.
<b>Viscosity</b>	Not applicable.
<b>Percent volatile</b>	Not available.
<b>Other information</b>	No relevant additional information available.

## Section 10: Stability and reactivity

<b>Reactivity</b>	The product is non reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Stable at normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerisation does not occur. Hazardous reactions do not occur.
<b>Conditions to avoid</b>	Moisture. Contact with incompatible materials.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## Section 11: Toxicological information

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

### Information on likely routes of exposure

<b>Ingestion</b>	Ingestion may cause irritation and malaise.
<b>Inhalation</b>	Dust may irritate respiratory system.
<b>Skin contact</b>	Dust may irritate skin.
<b>Eye contact</b>	Dust may irritate the eyes.

**Symptoms** Irritation of eyes and mucous membranes. Irritation of nose and throat.

### Information on toxicological effects

**Acute toxicity** Dust may cause eye, skin and respiratory tract irritation.

### Product

### Test results

Aluminium oxide (1344-28-1)	Acute Inhalation LC50 Rat: > 2,3 mg/l 4 hours Acute Oral LD50 Rat: > 5000 mg/kg
-----------------------------	--

**Skin corrosion/irritation** May cause irritation through mechanical abrasion.

**Serious eye damage/eye irritation** May cause irritation through mechanical abrasion.

**Respiratory sensitisation** Not classified.

**Skin sensitisation** Not a skin sensitiser.

**Germ cell mutagenicity** Test data conclusive but not sufficient for classification.

**Carcinogenicity** Test data conclusive but not sufficient for classification.

**Reproductive toxicity** Test data conclusive but not sufficient for classification.

**Specific target organ toxicity - single exposure** Test data conclusive but not sufficient for classification.

**Specific target organ toxicity - repeated exposure** Test data conclusive but not sufficient for classification.

**Aspiration hazard** Not classified.



<b>Mixture versus substance information</b>	Not available.
<b>Other information</b>	Prolonged and repeated overexposure to dust can lead to pneumoconiosis.

## Section 12: Ecological information

### Toxicity

Product	Test results
Aluminium oxide (1344-28-1)	EC50 Daphnia magna: > 100 mg/l 48 hours EC50 Green algae (Selenastrum capricornutum): > 100 mg/l 72 hours LC50 Salmo trutta: > 100 mg/l 96 hours
<b>Persistence and degradability</b>	The product is not biodegradable.
<b>Bioaccumulative potential</b>	The product is not bioaccumulating.
<b>Mobility</b>	The product is insoluble in water.
<b>Environmental fate - Partition coefficient</b>	Not applicable.
<b>Mobility in soil</b>	Aluminum oxide is not mobile in the environment, unless it comes into contact with an aqueous environment with a pH below 5,5 or above 8,5.
<b>Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture.
<b>Other adverse effects</b>	Not expected to be harmful to aquatic organisms.

## Section 13: Disposal considerations

### Waste treatment methods

<b>Residual waste</b>	Recover and recycle, if practical. Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Offer rinsed packaging material to local recycling facilities. Dispose of in accordance with local regulations.
<b>EU waste code</b>	16 05 09
<b>Disposal methods/information</b>	Dispose in accordance with all applicable regulations.

## Section 14: Transport information

### ADR

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

### RID

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

### ADN

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

### IATA

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

### IMDG

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

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** No information available.

## Section 15: Regulatory information

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

#### EU regulations

**Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I**  
Not listed.

**Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II**  
Not listed.

**Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I**  
Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1**  
Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2**  
Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V**

Not listed.

**Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Registry (EPER)**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List**

Not listed.

<b>Other regulations</b>	This substance does not meet the criteria for classification according to Regulation (EC) 1272/2008 (CLP Regulation) and Directive 67/548/EEC and their amendments respectively. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.
<b>National regulations</b>	Follow national regulation for work with chemical agents.
<b>Chemical safety assessment</b>	For this substance a chemical safety assessment has been carried out.

## Section 16: Other information

<b>List of abbreviations</b>	DNEL: Derived No-Effect Level. PNEC: Predicted No-Effect Concentration. PBT: Persistent, bioaccumulative and toxic. vPvB: Very Persistent and very Bioaccumulative. DSD: Directive 67/548/EEC. CLP: Regulation No. 1272/2008. LD50: Lethal Dose, 50%. LC50: Lethal Concentration, 50%.
<b>References</b>	IUCLID Chemical safety report.
<b>Information on evaluation method leading to the classification of mixture</b>	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
<b>Full text of any statements or R-phrases and H-phrases under Sections 2 to 15</b>	None.
<b>Training information</b>	Follow training instructions when handling this material.
<b>Disclaimer</b>	The information in the sheet was written based on the best knowledge and experience currently available.
<b>Issue date</b>	01-February-2012
<b>Revision date</b>	01-February-2012
<b>Print date</b>	01-February-2012