# **SAFETY DATA SHEET**



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

1.1. Product identifier

Trade name or JADECAST 95

designation of the mixture

Registration number -

**Synonyms** None. **Brand Code** 417B

**Issue date** 05-February-2018

Version number 01

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

**Identified uses** For Industrial Use Only

**Uses advised against** None known.

1.3. Details of the supplier of the safety data sheet

**Supplier** 

Company name HarbisonWalker International

**Address** 1305 Cherrington Parkway, Suite 100

Moon Township, PA 15108, USA

**United States** 

**Division** 

**Telephone** General Phone: 412-375-6600

CHEMTREC EMERGENCY

US/CAN ONLY

e-mail sds@thinkHWI.com

**Contact person** HWI USA **1.4. Emergency telephone** Not available.

number

## **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

1-800-424-9300

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

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

**Hazard summary** Exposure to powder or dusts may be irritating to eyes, nose and throat.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains:Boric acidHazard pictogramsNone.Signal wordNone.

**Hazard statements** The mixture does not meet the criteria for classification.

**Precautionary statements** 

**Prevention** Observe good industrial hygiene practices.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

Supplemental label information

After installation and during service, exposure of this product to high temperature and/or certain chemical elements may cause a change to occur to this product and create chrome (VI) compounds. Therefore, during tear out, care should be taken in the removal and handling of this product. Exposure to chrome (VI) compounds may cause cancer. Excessive inhalation will increase the risk of serious respiratory damage. Limit contact with eyes, skin, and mucous membranes since chrome (VI) compounds are also corrosive and may cause skin and nasal septum ulcers. NIOSH approved respirators and protective clothing should be worn while handling this product during

2.3. Other hazards

None known.

#### **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### **General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Aluminium Oxide (Non-Fibrous)	10 - 20	1344-28-1	-	-	
		215-691-6			
Classification: -					
Boric acid	0,1 - 1	10043-35-3	-	005-007-00-2	
		233-139-2			
Classification: -					
TRADE SECRET	0,1 - 1	Proprietary	-	-	
Classification: -		-			

Other components below reportable levels 80 - 90

#### List of abbreviations and symbols that may be used above

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

M: M-factor

PBT: persistent, bioaccumulative and toxic substance. vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

The full text for all H-statements is displayed in section 16.

#### **SECTION 4: First aid measures**

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

4.1. Description of first aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**Wash off with soap and water. Get medical attention if irritation develops and persists. **Eye contact**Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

IngestionRinse mouth. Get medical attention if symptoms occur.4.2. Most importantDusts may irritate the respiratory tract, skin and eyes.

symptoms and effects, both

acute and delayed

4.3. Indication of any immediate medical attention

and special treatment

needed

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

**General fire hazards** Not available.

5.1. Extinguishing media

Suitable extinguishing

ıg

Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing** 

media

media

Not available.

5.2. Special hazards arising

from the substance or

mixture

Not available.

5.3. Advice for firefighters

**Special protective** equipment for firefighters

Not available.

Special fire fighting

procedures

Not available.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency

personnel

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during

clean-up. For personal protection, see section 8 of the SDS.

For emergency

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

responders

6.2. Environmental

precautions 6.3. Methods and material for

containment and cleaning up

Avoid discharge into drains, water courses or onto the ground.

Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4. Reference to other

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

# sections

7.1. Precautions for safe handling

Minimise dust generation and accumulation. Provide appropriate exhaust ventilation at places

where dust is formed. Practice good housekeeping.

7.2. Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a well-ventilated place. Store away from

incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s) Not available.

**SECTION 7: Handling and storage** 

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### **Occupational exposure limits**

Austria. MAK List, OEL Ordinance Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	MAK	5 mg/m3	Respirable fraction.
		5 mg/m3	Respirable fume.
		10 mg/m3	Inhalable fraction.
	STEL	20 mg/m3	Inhalable fraction.
		10 mg/m3	Respirable fume.
		10 mg/m3	Respirable fraction.
Chromium (III) oxide (CAS 1308-38-9)	MAK	2 mg/m3	
Belgium. Exposure Limit Values.			
Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.
Boric acid (CAS 10043-35-3)	STEL	6 mg/m3	
,	TWA	2 mg/m3	
Bulgaria. OELs. Regulation No 13	3 on protection of workers again	nst risks of exposure to	chemical agents at work
Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	3,5 mg/m3	Respirable fraction.
•		10 mg/m3	Dust.
		1,5 mg/m3	Respirable fraction.

Components	Туре	Value	chemical agents at wor Form
Chromium (III) oxide (CAS 1308-38-9)	TWA	2 mg/m3	
Croatia. Dangerous Substance E 13/09	xposure Limit Values in the Workplace	(ELVs), Annexes	1 and 2, Narodne Novi
Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	MAC	4 mg/m3	Respirable dust.
		10 mg/m3	Total dust.
Czech Republic. OELs. Governme Components	ent Decree 361 Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS	TWA	0,1 mg/m3	Respirable dust.
1344-28-1) Chromium (III) oxide (CAS 1308-38-9)	Ceiling	1,5 mg/m3	
1300-30-9)	TWA	0,5 mg/m3	
Denmark. Exposure Limit Values		V-I	Form
Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TLV	5 mg/m3	Total
1511 20 1)		2 mg/m3	Respirable.
	osure Limits of Hazardous Substances.	(Annex of Regula	ation No. 293 of 18
September 2001) Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS	TWA	4 mg/m3	Respirable dust.
1344-28-1)		10/ 2	Takal dirak
		10 mg/m3	Total dust.
Chromium (III) oxide (CAS	STEL	0,06 mg/m3	
	STEL TWA	0,06 mg/m3 0,02 mg/m3	
1308-38-9) Finland. Workplace Exposure Lin	TWA nits	0,02 mg/m3	
1308-38-9)  Finland. Workplace Exposure Lin  Components	TWA nits Type	0,02 mg/m3	
Finland. Workplace Exposure Lin Components  Boric acid (CAS 10043-35-3) Chromium (III) oxide (CAS	TWA nits	0,02 mg/m3	
Finland. Workplace Exposure Lin Components  Boric acid (CAS 10043-35-3) Chromium (III) oxide (CAS 1308-38-9)  France. Threshold Limit Values (	TWA nits Type TWA TWA TWA TWA VLEP) for Occupational Exposure to Ch	0,02 mg/m3  Value  0,5 mg/m3 0,5 mg/m3	e, INRS ED 984
Finland. Workplace Exposure Lin Components  Boric acid (CAS 10043-35-3) Chromium (III) oxide (CAS 1308-38-9)  France. Threshold Limit Values (Components	TWA  nits  Type  TWA  TWA  TWA  VLEP) for Occupational Exposure to Ch  Type	0,02 mg/m3  Value  0,5 mg/m3 0,5 mg/m3  nemicals in France Value	e, INRS ED 984
Finland. Workplace Exposure Lin Components  Boric acid (CAS 10043-35-3) Chromium (III) oxide (CAS 1308-38-9)  France. Threshold Limit Values (Components  Aluminium Oxide (Non-Fibrous) (CAS	TWA nits Type TWA TWA TWA TWA VLEP) for Occupational Exposure to Ch	0,02 mg/m3  Value  0,5 mg/m3 0,5 mg/m3	e, INRS ED 984
Finland. Workplace Exposure Lin Components  Boric acid (CAS 10043-35-3) Chromium (III) oxide (CAS 1308-38-9)  France. Threshold Limit Values (Components  Aluminium Oxide	TWA  nits  Type  TWA  TWA  TWA  VLEP) for Occupational Exposure to Ch  Type	0,02 mg/m3  Value  0,5 mg/m3 0,5 mg/m3  nemicals in France Value	e, INRS ED 984
Finland. Workplace Exposure Lin Components  Boric acid (CAS 10043-35-3) Chromium (III) oxide (CAS 1308-38-9)  France. Threshold Limit Values (Components  Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1) Chromium (III) oxide (CAS 1308-38-9)  Germany. DFG MAK List (advisor	TWA  nits  Type  TWA  TWA  TWA  VLEP) for Occupational Exposure to Ch  Type  VME  VME  VME  TY OELs). Commission for the Investiga	0,02 mg/m3  Value  0,5 mg/m3 0,5 mg/m3  nemicals in France Value  10 mg/m3	
Finland. Workplace Exposure Lin Components  Boric acid (CAS 10043-35-3) Chromium (III) oxide (CAS 1308-38-9)  France. Threshold Limit Values (Components  Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1) Chromium (III) oxide (CAS 1308-38-9)	TWA  nits  Type  TWA  TWA  TWA  VLEP) for Occupational Exposure to Ch  Type  VME  VME  VME  TY OELs). Commission for the Investiga  FG)	0,02 mg/m3  Value  0,5 mg/m3 0,5 mg/m3  nemicals in France Value  10 mg/m3	
Finland. Workplace Exposure Lin Components  Boric acid (CAS 10043-35-3) Chromium (III) oxide (CAS 1308-38-9)  France. Threshold Limit Values (Components  Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1) Chromium (III) oxide (CAS 1308-38-9)  Germany. DFG MAK List (advisor Components  Components	TWA  nits  Type  TWA  TWA  TWA  VLEP) for Occupational Exposure to Ch  Type  VME  VME  VME  TY OELs). Commission for the Investiga	0,02 mg/m3  Value  0,5 mg/m3 0,5 mg/m3  nemicals in France Value  10 mg/m3  2 mg/m3  ation of Health Ha	zards of Chemical
Finland. Workplace Exposure Lin Components  Boric acid (CAS 10043-35-3) Chromium (III) oxide (CAS 1308-38-9)  France. Threshold Limit Values (Components  Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1) Chromium (III) oxide (CAS 1308-38-9)  Germany. DFG MAK List (advisor Components  Aluminium Oxide (CAS 1408-38-9)  Germany. DFG MAK List (Advisor Components  Aluminium Oxide (Non-Fibrous) (CAS	TWA  nits  Type  TWA  TWA  TWA  VLEP) for Occupational Exposure to Ch  Type  VME  VME  VME  TYPE  TYPE  TYPE  TYPE  TYPE  TYPE  TYPE  TYPE	0,02 mg/m3  Value  0,5 mg/m3 0,5 mg/m3  nemicals in France Value  10 mg/m3  2 mg/m3  tion of Health Ha  Value  4 mg/m3	zards of Chemical Form Inhalable fraction.
Finland. Workplace Exposure Lin Components  Boric acid (CAS 10043-35-3) Chromium (III) oxide (CAS 1308-38-9)  France. Threshold Limit Values (Components  Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1) Chromium (III) oxide (CAS 1308-38-9)  Germany. DFG MAK List (advisor Components  Aluminium Oxide (Non-Fibrous) (CAS 1308-38-9)  Germany. DFG MAK List (advisor Compounds in the Work Area (D Components  Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA  nits  Type  TWA  TWA  TWA  VLEP) for Occupational Exposure to Ch  Type  VME  VME  VME  TYPE  TYPE  TYPE  TYPE  TYPE  TYPE  TYPE  TYPE	0,02 mg/m3  Value  0,5 mg/m3 0,5 mg/m3  nemicals in France Value  10 mg/m3  2 mg/m3  tion of Health Ha  Value  4 mg/m3  1,5 mg/m3	zards of Chemical Form Inhalable fraction. Respirable fraction.
Finland. Workplace Exposure Lin Components  Boric acid (CAS 10043-35-3) Chromium (III) oxide (CAS 1308-38-9)  France. Threshold Limit Values (Components  Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1) Chromium (III) oxide (CAS 1308-38-9)  Germany. DFG MAK List (advisor Compounds in the Work Area (D Components  Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)  Boric acid (CAS 10043-35-3)	TWA  nits  Type  TWA  TWA  TWA  VLEP) for Occupational Exposure to Ch  Type  VME  VME  VME  Ty OELs). Commission for the Investiga  FG)  Type  TWA	0,02 mg/m3  Value  0,5 mg/m3 0,5 mg/m3  nemicals in France Value  10 mg/m3  2 mg/m3  tion of Health Ha  Value  4 mg/m3	zards of Chemical Form Inhalable fraction.

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Germany. TRGS 900, Limit Values Components	Type	worкріасе Value	Form
		1,25 mg/m3	Respirable fraction.
Boric acid (CAS 10043-35-3)	AGW	0,5 mg/m3	Inhalable fraction.
Chromium (III) oxide (CAS 1308-38-9)	AGW	2 mg/m3	Inhalable fraction.
Greece. OELs (Decree No. 90/199 Components	9, as amended) Type	Value	Form
Aluminium Oxide	TWA	5 mg/m3	Inhalable
(Non-Fibrous) (CAS 1344-28-1)		3 1119/1113	
Chromium (III) oxide (CAS 1308-38-9)	TWA	10 mg/m3 0,5 mg/m3	Respirable.
Hungary. OELs. Joint Decree on C	hemical Safety of Workpla	ces	
Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	6 mg/m3	Respirable.
Chromium (III) oxide (CAS 1308-38-9)	STEL	2 mg/m3	
•	TWA	0,5 mg/m3	
Iceland. OELs. Regulation 154/19 Components	999 on occupational exposu Type	ure limits Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	10 mg/m3	
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m3	Dust.
Ireland. Occupational Exposure L Components	imits Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	4 mg/m3	Respirable dust.
Chromium (III) oxide (CAS 1308-38-9)	TWA	10 mg/m3 2 mg/m3	Total inhalable dust.
Italy. Occupational Exposure Lim	its		
Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.
Boric acid (CAS 10043-35-3)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.
Latvia. OELs. Occupational expos Components	ure limit values of chemica Type	l substances in work enviror Value	nment Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	6 mg/m3	Decomposition aerosol
10 IT-20-1)		4 mg/m3	
Boric acid (CAS 10043-35-3)	TWA	10 mg/m3	
Chromium (III) oxide (CAS 1308-38-9)	TWA	1 mg/m3	
Lithuania. OELs. Limit Values for Components	Chemical Substances, Gen Type	eral Requirements Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	5 mg/m3	Inhalable fraction.
1344-78-11			
1344-20-1)		2 mg/m3	Respirable fraction.

424), Schedules I and V) Components	Туре	Value	
Chromium (III) oxide (CAS 1308-38-9)	TWA	2 mg/m3	
Norway. Administrative Norms forms for the Components	or Contaminants in the Wor Type	kplace Value	
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TLV	10 mg/m3	
Chromium (III) oxide (CAS 1308-38-9)	TLV	0,5 mg/m3	
Poland. MACs. Minister of Labou	r and Social Policy Regardin	g Maximum Allowable Cond	entrations and Intensiti
in Working Environment Components	Туре	Value	Form
Aluminium Oxide	TWA	2,5 mg/m3	Inhalable fraction.
(Non-Fibrous) (CAS 1344-28-1)			
,		1,2 mg/m3	Respirable fraction.
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m3	
Portugal. VLEs. Norm on occupat Components	ional exposure to chemical Type	agents (NP 1796) Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	10 mg/m3	
Boric acid (CAS 10043-35-3)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m3	
Romania. OELs. Protection of wo Components	rkers from exposure to che Type	mical agents at the workpla Value	rce Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	STEL	5 mg/m3	Aerosol
•	TWA	2 mg/m3	Aerosol
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m3	
Slovakia. OELs. Regulation No. 3 Components	00/2007 concerning protec Type	tion of health in work with Value	chemical agents Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	4 mg/m3	Inhalable fraction.
		1,5 mg/m3 0,1 mg/m3	Respirable fraction.
Slovenia. OELs. Regulations cond		rs against risks due to expo	sure to chemicals while
working (Official Gazette of the Components	Republic of Slovenia) Type	Value	
Chromium (III) oxide (CAS 1308-38-9)	TWA	2 mg/m3	
Spain. Occupational Exposure Li Components	nits Type	Value	
<u> </u>			
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	10 mg/m3	
Boric acid (CAS 10043-35-3)	STEL	6 mg/m3	
	TWA	2 mg/m3	
Chromium (III) oxide (CAS	TWA	2 mg/m3	

Chromium (III) oxide (CAS 1308-38-9)

Sweden. Occupational Exposure Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	5 mg/m3	Total dust.
		2 mg/m3	Respirable dust.
Switzerland. SUVA Grenzwerte a	m Arbeitsplatz		
Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	STEL	24 mg/m3	Fume and respirable dust
	TWA	3 mg/m3	Respirable dust.
		3 mg/m3	Fume and respirable dust
Boric acid (CAS 10043-35-3)	STEL	10 mg/m3	Inhalable dust.
	TWA	10 mg/m3	Inhalable dust.
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m3	Inhalable dust.
UK. EH40 Workplace Exposure Li	mits (WELs)		
Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m3	

## **Biological limit values**

Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

Components	Value	Determinant	Specimen	Sampling time
Chromium (III) oxide (CAS 1308-38-9)	0,02 mg/g	chromium	Creatinine in urine	*
	0,043 µmol/mmol	chromium	Creatinine in urine	*

<sup>\* -</sup> For sampling details, please see the source document.

Recommended monitoring procedures

Follow standard monitoring procedures.

Derived no effect levels (DNELs)

Not available.

Predicted no effect concentrations (PNECs)

Not available.

**Exposure guidelines** 

Zirconium silicates (zircon sands) contain trace amounts (106-120 pCi/g) of naturally occurring radioactive uranium and thorium. Overexposure by inhalation to respirable dust containing uranium and thorium may cause lung cancer. Eye contact with the dust may cause eye irritation. Measurements made by Dupont during the use of a similar mineral sand indicated the observance of the 5 mg/m3 OSHA PEL for respirable dust and/or the PEL for quartz ensures the user is below the exposure limits established for uranium and thorium. No LD50 or LC50 can be found for zircon sand.

#### 8.2. Exposure controls

Appropriate engineering controls

If material is ground, cut, or used in any operation which may generate dusts, use appropriate local

exhaust ventilation to keep exposures below the recommended exposure limits.

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

**General information** Personal protection equipment should be chosen according to the CEN standards and in discussion

with the supplier of the personal protective equipment.

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection** 

**- Hand protection** Wear appropriate chemical resistant gloves.

**- Other** Wear suitable protective clothing.

**Respiratory protection** Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels

exceeding the exposure limits.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.







**Hygiene measures** Always observe good personal hygiene measures, such as washing after handling the material and

before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to

remove contaminants.

**Environmental exposure** 

controls

Environmental manager must be informed of all major releases.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

**Appearance** 

Physical state Solid.
Form Powder.
Colour Not available.
Odour Not available.
Odour threshold Not available.
PH Not available.
Melting point/freezing point Not available.
Initial boiling point and Not available.

boiling range

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

er Not available.

. . -•

Flammability limit -

upper (%)

Not available.

Vapour pressureNot available.Vapour densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water)

Solubility (other)

Partition coefficient

Not available.

Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.Explosive propertiesNot explosive.Oxidising propertiesNot oxidising.

**9.2. Other information**No relevant additional information available.

#### SECTION 10: Stability and reactivity

**10.1. Reactivity**The product is stable and non-reactive under normal conditions of use, storage and transport.

**10.2. Chemical stability** Material is stable under normal conditions.

10.3. Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

**10.4. Conditions to avoid** Contact with incompatible materials.

**10.5. Incompatible materials** Strong oxidising agents.

Incompatibility is based strictly upon potential theoretical reactions between chemicals and may not

be specific to industrial application exposure.

10.6. Hazardous

decomposition products

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

Inhalation Dust may irritate respiratory system. Skin contact Dust or powder may irritate the skin.

**Eve contact** Dust may irritate the eyes.

Ingestion May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of

occupational exposure.

**Symptoms** Dusts may irritate the respiratory tract, skin and eyes.

#### 11.1. Information on toxicological effects

Components **Species Test results** 

Boric acid (CAS 10043-35-3)

**Acute Inhalation** 

LC50 Rat > 0,002 mg/l, 4 Hours

\* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Based on available data, the classification criteria are not met. Serious eye damage/eye Based on available data, the classification criteria are not met.

irritation

Respiratory sensitisation Based on available data, the classification criteria are not met. Skin sensitisation Based on available data, the classification criteria are not met. Germ cell mutagenicity Based on available data, the classification criteria are not met. Carcinogenicity Based on available data, the classification criteria are not met.

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

Not listed.

Reproductive toxicity Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity

- single exposure

Specific target organ toxicity

- repeated exposure

**Aspiration hazard** 

Mixture versus substance

information

Due to partial or complete lack of data the classification is not possible.

No information available.

Other information Not available.

## **SECTION 12: Ecological information**

12.1. Toxicity Based on available data, the classification criteria are not met for hazardous to the aquatic

environment.

12.2. Persistence and

degradability

No data is available on the degradability of this product.

12.3. Bioaccumulative No data available.

potential

Not available. **Partition coefficient** 

n-octanol/water (log Kow)

**Bioconcentration factor (BCF)** Not available. 12.4. Mobility in soil No data available. 12.5. Results of PBT Not available.

and vPvB assessment

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

#### **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Material name: JADECAST 95 SDS FU **Residual waste** As sold, this product is not RCRA hazardous. Final used condition must be evaluated prior to

disposal. Dispose of waste product in accordance with Federal, State and Local regulations. The chrome compounds (Cr III) in this product may be altered to a hexavalent compound (Cr VI) under certain use conditions, such as exposure to alkali salts and/or high temperatures. Proper waste testing (such as TCLP)must be done to determine the waste status of used product. Reuse and recycling of chrome Refractories is recommended whenever possible.

recycling of chrome Retraction

**Contaminated packaging**Not available. **EU waste code**Not available.

#### **SECTION 14: Transport information**

**ADR** 

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

**ADN** 

14.1. - 14.6.: Not regulated as dangerous goods.

**IATA** 

14.1. - 14.6.: Not regulated as dangerous goods.

**IMDG** 

14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

## **SECTION 15: Regulatory information**

# 15.1. 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 (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Boric acid (CAS 10043-35-3)

#### **Authorisations**

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed.

#### **Restrictions on use**

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use Not regulated.

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Boric acid (CAS 10043-35-3)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not listed.

#### Other EU regulations

#### Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Other regulations

Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC)

No 1907/2006, as amended.

**National regulations** Follow national regulation for work with chemical agents.

15.2. Chemical safety

assessment

No Chemical Safety Assessment has been carried out.

## **SECTION 16: Other information**

List of abbreviations Not available. References Not available. **Information on evaluation** Not available.

method leading to the classification of mixture

**Full text of any H-statements** not written out in full under

None.

Sections 2 to 15

**Revision information** Product and Company Identification: Product and Company Identification

Composition / Information on Ingredients: Ingredients

Toxicological Information: Toxicological Data

**Ecological Information: Ecotoxicity** 

GHS: Classification

**Training information** 

Not available.

Disclaimer This information is based on our present knowledge on creation date. However, this shall not

constitute a guarantee for any specific product features and shall not establish a legally valid

contractual relationship.

Material name: JADECAST 95 SDS FU

417B Version #: 01 Issue date: 05-February-2018