

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

1.1. Product identifier

Trade name or designation of the mixture AUREX 65 PLASTIC
Registration number -
Synonyms None.
Brand Code 1768
Issue date 02-May-2022
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 Users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

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: 412-375-6743
CHEMTREC EMERGENCY 1-800-424-9300
US/CAN ONLY

e-mail sds@thinkHWI.com

Contact person HWI USA

1.4. Emergency telephone number General Phone: 412-375-6600

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.

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

Health hazards

Serious eye damage/eye irritation Category 2 H319 - Causes serious eye irritation.

Hazard summary

Material can be slippery when wet. Causes serious eye irritation. Prolonged exposure may cause chronic effects. Occupational exposure to the substance or mixture may cause adverse health effects.

2.2. Label elements

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

Contains: Aluminium Tris(Dihydrogen Phosphate)

Hazard pictograms



Signal word Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

Prevention

P264 Wash thoroughly after handling.

P280

Wear eye protection/face protection.

Response

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

Not available.

Disposal

Not available.

Supplemental label information

Users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Overexposure to the respirable dust of crystalline silica (quartz or cristobalite, less than or equal to 5 microns in size) may lead to silicosis in humans, which is a progressive and irreversible lung disease. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

2.3. Other hazards

Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Aluminium Tris(Dihydrogen Phosphate)	2,5 - 10	13530-50-2 236-875-2	-	-	
Classification:	Eye Dam. 1;H318				
Orthophosphoric acid	2,5 - 10	7664-38-2 231-633-2	-	015-011-00-6	#
Classification:	Skin Irrit. 2;H315, Eye Irrit. 2;H319				B
Other components below reportable levels	80 - 100				

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.

Composition comments

Bentonite contains naturally occurring crystalline silica (not listed in Annex I of Directive 67/548/EEC) in quantities less than 6%. The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures**General information**

Not available.

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

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

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

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

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

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures**General fire hazards**

Not available.

5.1. Extinguishing media**Suitable extinguishing media**

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing 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. Keep people away from and upwind of spill/leak. Material can be slippery when wet. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid contact with eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	MAK	5 mg/m ³	Respirable fraction.
		5 mg/m ³	Respirable fume.
	STEL	10 mg/m ³	Inhalable fraction.
		20 mg/m ³	Inhalable fraction.
		10 mg/m ³	Respirable fraction.
Chromium (III) oxide (CAS 1308-38-9)	MAK	10 mg/m ³	Respirable fume.
		2 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	MAK	1 mg/m ³	
	STEL	2 mg/m ³	

Belgium. Exposure Limit Values.

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	1 mg/m ³	Respirable fraction.

Belgium. Exposure Limit Values.

Components	Type	Value	Form
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	2 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³	
	TWA	1 mg/m ³	

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

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	3,5 mg/m ³	Respirable fraction.
		10 mg/m ³	Dust.
		1,5 mg/m ³	Respirable fraction.
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	2 mg/m ³	
Bentonite (CAS 1302-78-9)	TWA	6 mg/m ³	Inhalable fraction.
		3 mg/m ³	Respirable fraction.
Chromium (III) oxide (CAS 1308-38-9)	TWA	2 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³	
	TWA	1 mg/m ³	

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	MAC	4 mg/m ³	Respirable dust.
		10 mg/m ³	Total dust.
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	MAC	2 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	MAC	1 mg/m ³	
	STEL	2 mg/m ³	

Czech Republic. OELs. Government Decree 361

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	0,1 mg/m ³	Respirable dust.
Bentonite (CAS 1302-78-9)	TWA	6 mg/m ³	Dust.
Chromium (III) oxide (CAS 1308-38-9)	Ceiling	1,5 mg/m ³	Aerosol, inhalable.
	TWA	0,5 mg/m ³	Aerosol, inhalable.
Orthophosphoric acid (CAS 7664-38-2)	Ceiling	2 mg/m ³	
	TWA	1 mg/m ³	
TRADE SECRET	TWA	4 mg/m ³	Dust.

Denmark. Exposure Limit Values

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TLV	5 mg/m ³	Total
		2 mg/m ³	Respirable.

Denmark. Exposure Limit Values Components

Components	Type	Value	Form
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TLV	1 mg/m3	
Orthophosphoric acid (CAS 7664-38-2)	TLV	1 mg/m3	

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

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	4 mg/m3	Fine dust, respiratory fraction
		10 mg/m3	Total dust.
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	2 mg/m3	
Chromium (III) oxide (CAS 1308-38-9)	STEL	0,06 mg/m3	
	TWA	0,02 mg/m3	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3	Vapour.
	TWA	1 mg/m3	Vapour.

Finland. Workplace Exposure Limits Components

Components	Type	Value
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	2 mg/m3
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m3
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 mg/m3

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

Components	Type	Value
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	VME	10 mg/m3
Regulatory status: Indicative limit (VL)		
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	VME	2 mg/m3
Regulatory status: Indicative limit (VL)		
Chromium (III) oxide (CAS 1308-38-9)	VME	2 mg/m3
Regulatory status: Regulatory indicative (VRI)		
Orthophosphoric acid (CAS 7664-38-2)	VLE	2 mg/m3
Regulatory status: Regulatory indicative (VRI)		
		0,5 ppm
Regulatory status: Regulatory indicative (VRI)		
	VME	1 mg/m3
Regulatory status: Regulatory indicative (VRI)		
		0,2 ppm
Regulatory status: Regulatory indicative (VRI)		

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

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	4 mg/m ³	Inhalable dust.
		1,5 mg/m ³	Respirable dust.
Orthophosphoric acid (CAS 7664-38-2)	TWA	2 mg/m ³	Inhalable fraction.
TRADE SECRET	TWA	2 mg/m ³	Inhalable fraction.

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

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	AGW	10 mg/m ³	Inhalable fraction.
		1,25 mg/m ³	Respirable fraction.
Chromium (III) oxide (CAS 1308-38-9)	AGW	2 mg/m ³	Inhalable fraction.
Orthophosphoric acid (CAS 7664-38-2)	AGW	2 mg/m ³	Inhalable fraction.
TRADE SECRET	AGW	2 mg/m ³	Inhalable fraction.

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

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	5 mg/m ³	Inhalable
		10 mg/m ³	Respirable.
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	2 mg/m ³	
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	STEL	3 mg/m ³	
	TWA	1 mg/m ³	

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	6 mg/m ³	Respirable.
Chromium (III) oxide (CAS 1308-38-9)	STEL	2 mg/m ³	
	TWA	0,5 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³	
	TWA	1 mg/m ³	

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

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	10 mg/m ³	
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	2 mg/m ³	
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m ³	Dust.
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³	

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

Components	Type	Value	Form
	TWA	1 mg/m ³	

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	4 mg/m ³	Respirable dust.
		10 mg/m ³	Total inhalable dust.
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	2 mg/m ³	
Chromium (III) oxide (CAS 1308-38-9)	TWA	2 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³	
	TWA	1 mg/m ³	

Italy. Occupational Exposure Limits

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	1 mg/m ³	Respirable fraction.
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	1 mg/m ³	Respirable fraction.
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³	
	TWA	1 mg/m ³	

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

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	6 mg/m ³	Decomposition aerosol.
		4 mg/m ³	
Chromium (III) oxide (CAS 1308-38-9)	TWA	1 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³	
	TWA	1 mg/m ³	

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	5 mg/m ³	Inhalable fraction.
		2 mg/m ³	Respirable fraction.
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	1 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³	
	TWA	1 mg/m ³	

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Components	Type	Value	Form
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³	
	TWA	1 mg/m ³	

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³
	TWA	1 mg/m ³

Netherlands. OELs (binding)

Components	Type	Value
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³
	TWA	1 mg/m ³

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TLV	10 mg/m ³
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TLV	2 mg/m ³
Chromium (III) oxide (CAS 1308-38-9)	TLV	0,5 mg/m ³
Orthophosphoric acid (CAS 7664-38-2)	TLV	1 mg/m ³

Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	2,5 mg/m ³	Inhalable fraction.
		1,2 mg/m ³	Respirable fraction.
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³	
	TWA	1 mg/m ³	

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³
	TWA	1 mg/m ³

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

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	1 mg/m ³	Respirable fraction.
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	1 mg/m ³	Respirable fraction.
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	STEL	3 mg/m ³	
	TWA	1 mg/m ³	

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

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	STEL	5 mg/m ³	Aerosol

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

Components	Type	Value	Form
	TWA	2 mg/m ³	Aerosol
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³	
	TWA	1 mg/m ³	

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	4 mg/m ³	Inhalable fraction.
		1,5 mg/m ³	Respirable fraction.
		0,1 mg/m ³	
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	2 mg/m ³	
Bentonite (CAS 1302-78-9)	TWA	6 mg/m ³	
Chromium (III) oxide (CAS 1308-38-9)	TWA	2 mg/m ³	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³	
	TWA	1 mg/m ³	

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	10 mg/m ³	Inhalable fraction.
		1,25 mg/m ³	Respirable fraction.
Chromium (III) oxide (CAS 1308-38-9)	TWA	2 mg/m ³	Inhalable fraction.
Orthophosphoric acid (CAS 7664-38-2)	TWA	1 mg/m ³	

Spain. Occupational Exposure Limits

Components	Type	Value
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	10 mg/m ³
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	2 mg/m ³
Chromium (III) oxide (CAS 1308-38-9)	TWA	2 mg/m ³
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m ³
	TWA	1 mg/m ³

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	5 mg/m ³	Total dust.
		2 mg/m ³	Respirable dust.
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	1 mg/m ³	Total dust.

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value	Form
Orthophosphoric acid (CAS 7664-38-2)	Ceiling	2 mg/m3	
	TWA	1 mg/m3	

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	STEL	24 mg/m3	Respirable dust and/or fume.
	TWA	3 mg/m3	Respirable dust and/or fume.
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	3 mg/m3	Respirable dust.
	TWA	2 mg/m3	Inhalable fraction.
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m3	Inhalable fraction.
Orthophosphoric acid (CAS 7664-38-2)	STEL	4 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.
TRADE SECRET	STEL	4 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.
Aluminium Tris(Dihydrogen Phosphate) (CAS 13530-50-2)	TWA	2 mg/m3	
Chromium (III) oxide (CAS 1308-38-9)	TWA	0,5 mg/m3	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Type	Value
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3
	TWA	1 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	*

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Components	Value	Determinant	Specimen	Sampling Time
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	60 µg/g	Aluminium	Creatinine in urine	*

* - 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	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

8.2. Exposure controls

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

General information

Use personal protective equipment as required. 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 Solid.

Colour Not available.

Odour Not available.

Odour threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapour pressure Not available.

Vapour density Not available.

Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not 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	Acids. Chlorine. 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	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Causes serious eye irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Symptoms	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

11.1. Information on toxicological effects

Acute toxicity	Not known.
Skin corrosion/irritation	Due to partial or complete lack of data the classification is not possible.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. Risk of cancer cannot be excluded with prolonged exposure.

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

Not listed.

Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Mixture versus substance information	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 any ingredients in the mixture.
12.3. Bioaccumulative potential	No data available.
Partition coefficient n-octanol/water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture. Not available.
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.

12.7. Additional information

Estonia Dangerous substances in groundwater Data

Orthophosphoric acid (CAS 7664-38-2)

Pesticides (total) 0,5 ug/l

Pesticides (total) 5 ug/l

Estonia Dangerous substances in soil Data

Orthophosphoric acid (CAS 7664-38-2)

Synthetic pesticides (total of active substances) 0,5 mg/kg

Synthetic pesticides (total of active substances) 20 mg/kg

Synthetic pesticides (total of active substances) 5 mg/kg

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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.
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 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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

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, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

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, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

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

Not listed.

Other EU regulations

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

Not listed.

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations

Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC.

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 method leading to the classification of mixture Not available.

Full text of any H-statements not written out in full under Sections 2 to 15

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

Revision information

Product and Company Identification: Physical States
Composition / Information on Ingredients: Ingredients
Toxicological Information: Toxicological Data
Ecological Information: Ecotoxicity
Transport Information: Material Transportation Information

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.