

ALPHA CHEMICALS PTY LTD

Chemwatch: **4879-16** Version No: **5.1.1.1**

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Sanodure Orange RL
Synonyms	Product Code: 104124
Other means of identification	Not Available
Relevant identified uses of the substance or mixture and uses advised against	
Relevant identified uses	Aluminium dye. Used in the metal processing industry. Use according to manufacturer's directions.

Details of the supplier of the safety data sheet

Registered company name	ALPHA CHEMICALS PTY LTD
Address	4 ALLEN PLACE WETHERILL PARK NSW 2099 Australia
Telephone	61 (0)2 9982 4622
Fax	Not Available
Website	~
Email	shane@alphachem.com.au

Emergency telephone number

Association / Organisation	ALPHA CHEMICALS PTY LTD	
Emergency telephone numbers	61 (0)418 237 771	
Other emergency telephone numbers	Not Available	

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

	Min	Max	
Flammability	1		
Toxicity	0		0 = Minimu
Body Contact	0		1 = Low 2 = Modera
Reactivity	1		3 = High
Chronic	2	i.	4 = Extreme

Poisons Schedule	Not Applicable
Classification ^[1]	Skin Sensitizer Category 1A
Legend:	1. Classified by Chernwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI
abel elements	

Hazard pictogram(s)	
SIGNAL WORD	WARNING
Hazard statement(s)	
H317	May cause an allergic skin reaction.

Chemwatch Hazard Alert Code: 2

lssue Date: 01/11/2019 Print Date: 05/02/2020 S.GHS.AUS.EN

Precautionary statement(s) Prevention

P261 Avoid breathing dust/fumes.	
P272 Contaminated work clothing should not be allowed out of the workplace.	

Precautionary statement(s) Response

	-
P321	Specific treatment (see advice on this label).
P363	Wash contaminated clothing before reuse.
P302+P352	IF ON SKIN: Wash with plenty of water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501

Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
Not Available	Not Spec	azo dyestuff anionic
107-41-5	1-<10	hexylene glycol
55965-84-9	NotSpec	isothiazolinones, mixed

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes: Wash out immediately with water. If irritation continues, seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- Water spray or fog.
- ► Foam.
- Dry chemical powder.
- BCF (where regulations permit).Carbon dioxide.
- · Carbon uloxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result	
Advice for firefighters		
Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. 	

	 Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	 Solid which exhibits difficult combustion or is difficult to ignite. Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust (420 micron or less) may burn rapidly and fiercely if ignited; once initiated larger particles up to 1400 microns diameter will contribute to the propagation of an explosion. A dust explosion may release large quantities of gaseous products; this in turn creates a subsequent pressure rise of explosive force capable of damaging plant and buildings and injuring people. Usually the initial or primary explosion takes place in a confined space such as plant or machinery, and can be of sufficient force to damage or rupture the plant. If the shock wave from the primary explosion enters the surrounding area, it will disturb any settled dust layers, forming a second dust cloud, and often initiate a much larger secondary explosion. All large scale explosions have resulted from chain reactions of this type. Dry dust can also be charged electrostatically by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport. Combustion products include: carbon monoxide (CO) carbon monoxide (NOX) sulfur oxides (SOX) other pyrolysis products typical of burning organic material.
HAZCHEM	Not Applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labelled container for waste disposal.
Major Spills	 Remove all ignition sources. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Control personal contact with the substance, by using protective equipment and dust respirator. Prevent spillage from entering drains, sewers or water courses. Avoid generating dust. Sweep, shovel up. Recover product wherever possible. Put residues in labelled plastic bags or other containers for disposal.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Suitable container

Precautions for safe handling

Safe handling	 Remove all ignition sources. Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions) Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame. Establish good housekeeping practices. Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds. Use continuous suction at points of dust generation to capture and minimise the accumulation of dusts. Particular attention should be given to overhead and hidden horizontal surfaces to minimise the probability of a "secondary" explosion. According to NFPA Standard 654, dust layers 1/32 in (0.8 mm) thick can be sufficient to warrant immediate cleaning of the area. Do not use air hoses for cleaning.
Other information	 Keep dry. Store under cover. Store in a well ventilated area. Store away from sources of heat or ignition. Observe manufacturer's storage and handling recommendations contained within this SDS.

▶ Lined metal can, lined metal pail/ can.

- Plastic pail.
- Polyliner drum.
- Packing as recommended by manufacturer.
 Check all containers are clearly labelled and free from leaks.

Storage incompatibility

Avoid reaction with oxidising agents

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL		Peak		Notes
Australia Exposure Standards	hexylene glycol	Hexylene glycol	Not Available	Not Avail	able	25 ppm / 121 mg/r	n3	Not Available
EMERGENCY LIMITS								
Ingredient	Material name		TEEL-1		TEEL-2		TEEL-3	
hexylene glycol	Hexylene glycol		2.3 ppm		25 ppm		150 ppm	
Ingredient	Original IDLH			Revise	d IDLH			
hexylene glycol	Not Available			Not Available				
isothiazolinones, mixed	Not Available			Not Ava	ailable			

OCCUPATIONAL EXPOSURE BANDING

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
isothiazolinones, mixed	E	≤ 0.1 ppm
Notes:	Occupational exposure banding is a process of assigning chemicals into s adverse health outcomes associated with exposure. The output of this pro range of exposure concentrations that are expected to protect worker hea	cess is an occupational exposure band (OEB), which corresponds to a

Exposure controls

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Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.
Personal protection	
Eye and face protection	 Safety glasses with side shields Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]
Skin protection	See Hand protection below
Hands/feet protection	The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended. Suitability and durability of glove type is dependent on usage. Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present. h polychloroprene. h nitrile rubber. h totyper. fluorocaoutchouc. polyvinyl chloride. Gloves should be examined for wear and/ or degradation constantly.
Body protection	See Other protection below
Other protection	No special equipment needed when handling small quantities. OTHERWISE: • Overalls. • Barrier cream. • Eyewash unit.

Type AK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	AK-AUS / Class1 P2	-
up to 50	1000	-	AK-AUS / Class 1 P2
up to 50	5000	Airline *	-
up to 100	5000	-	AK-2 P2
up to 100	10000	-	AK-3 P2
100+			Airline**

* - Continuous Flow ** - Continuous-flow or positive pressure demand

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Red granules; partially miscible with water (40 g/l)			
Physical state	Divided Solid	Relative density (Water = 1)	0.800 (bulk)	
Odour	Not Available	Partition coefficient n-octanol / water	Not Available	
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available	
pH (as supplied)	Not Applicable	Decomposition temperature	190-210	
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Applicable	
Initial boiling point and boiling range (°C)	Not Applicable	Molecular weight (g/mol)	Not Applicable	
Flash point (°C)	Not Applicable	Taste	Not Available	
Evaporation rate	Not Applicable	Explosive properties	Not Available	
Flammability	Not Applicable	Oxidising properties	Not Available	
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Applicable	
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Applicable	
Vapour pressure (kPa)	Not Applicable	Gas group	Not Available	
Solubility in water	Partly miscible	pH as a solution (1%)	10-11 (3g/l)	
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available	

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.
Eye	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may cause transient discomfort characterised by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result.
Chronic	Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis, caused by particles less than 0.5 micron penetrating and remaining in the lung.

	TOXICITY	IRRITATION	
Sanodure Orange RL	Oral (Rat) LD50: >5000 mg/kg ^[2]	Eye : Not irritating	
		Skin : Not irritating)
	тохісіту	IRRITATION	
	Dermal (rabbit) LD50: >5000 mg/kg ^[2]	Eye (rabbit): 93mg	J - SEVERE
	Oral (rat) LD50: =3692 mg/kg ^[2]	Eye: no adverse e	ffect observed (not irritating) ^[1]
hexylene glycol		Skin (rabbit):465 r	ng open-mild
		Skin (rabbit):465m	ng/24hr-moderate
		Skin: no adverse	effect observed (not irritating) ^[1]
	тохісіту	IRRITATION	
	dermal (rat) LD50: >1008 mg/kg ^[1]	Eye: adverse effe	ct observed (irreversible damage) ^[1]
isothiazolinones, mixed	Oral (rat) LD50: 53 mg/kg ^[2]	Skin: adverse effe	ct observed (corrosive) ^[1]
		Skin: adverse effe	ct observed (irritating) ^[1]
Legend:	 Value obtained from Europe ECHA Registered Subst specified data extracted from RTECS - Register of Toxic 		ned from manufacturer's SDS. Unless otherwise
	Contact allergies quickly manifest themselves as contact	a group and may not be specific to th t eczema, more rarely as urticaria or	
ISOTHIAZOLINONES, MIXED	eczema involves a cell-mediated (T lymphocytes) immu involve antibody-mediated immune reactions. The signif distribution of the substance and the opportunities for co distributed can be a more important allergen than one w clinical point of view, substances are noteworthy if they The material may be irritating to the eye, with prolonged conjunctivitis. The material may cause skin irritation after prolonged or vesicles, scaling and thickening of the skin.	tt eczema, more rarely as urticaria or ne reaction of the delayed type. Othe ficance of the contact allergen is not s ontact with it are equally important. A <i>i</i> th stronger sensitising potential with produce an allergic test reaction in m I contact causing inflammation. Repea r repeated exposure and may produce	Quincke's oedema. The pathogenesis of contact r allergic skin reactions, e.g. contact urticaria, simply determined by its sensitisation potential: the weakly sensitising substance which is widely which few individuals come into contact. From a ore than 1% of the persons tested. ated or prolonged exposure to irritants may produ- e on contact skin redness, swelling, the production
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SECTION 12 ECOLOGICAL INFORMATION

	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	EC50	72 72	Algae or other aquatic plants Algae or other aquatic plants	>429mg/L 429mg/L	2
hexylene glycol	EC50	48	Crustacea	2-800mg/L	2
	LC50	96	Fish	8-mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Sanodure Orange RL	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE

	EC50	48	Crustacea	0.007mg/L 2
	EC50	72	Algae or other aquatic plants	0.0063mg/L 2
	NOEC	48	Algae or other aquatic plants	0.00049mg/L 2
Legend:	V3.12 (QSAR) ·	1. IUCLID Toxicity Data 2. Europe ECHA Register Aquatic Toxicity Data (Estimated) 4. US EPA, Ec apan) - Bioconcentration Data 7. METI (Japan) - t	otox database - Aquatic Toxicity Data 5. ECETO	, ,

Biodegradability: ~55% (14d TOC) Fish toxicity: LC50: 130 mg/l (48 h, rainbow trout) DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
hexylene glycol LOW		LOW

Bioaccumulative potential

Ingredient	Bioaccumulation	
hexylene glycol	LOW (LogKOW = 0.5802)	

Mobility in soil

Ingredient	Mobility
hexylene glycol	HIGH (KOC = 1)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	 Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Bury residue in an authorised landfill. Recycle containers if possible, or dispose of in an authorised landfill.
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SECTION 14 TRANSPORT INFORMATION

Labels Required		
Marine Pollutant	NO	
HAZCHEM	Not Applicable	

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

HEXYLENE GLYCOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australia Inventory of Chemical Substances (AICS)

GESAMP/EHS Composite List - GESAMP Hazard Profiles

ISOTHIAZOLINONES, MIXED IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

IMO IBC Code Chapter 17: Summary of minimum requirements IMO IBC Code Chapter 18: List of products to which the Code does not apply IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances

International Air Transport Association (IATA) Dangerous Goods Regulations International Maritime Dangerous Goods Requirements (IMDG Code) United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

National Inventory Status

National Inventory	Status	
Australia - AICS	lo (isothiazolinones, mixed)	
Canada - DSL		
Canada - NDSL	No (isothiazolinones, mixed; hexylene glycol)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	No (isothiazolinones, mixed)	

Japan - ENCS	No (isothiazolinones, mixed)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	No (isothiazolinones, mixed)
Taiwan - TCSI	Yes
Mexico - INSQ	No (isothiazolinones, mixed)
Vietnam - NCI	Yes
Russia - ARIPS	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Revision Date	01/11/2019
Initial Date	21/10/2013

SDS Version Summary

Version	Issue Date	Sections Updated
4.1.1.1	28/03/2019	Physical Properties
5.1.1.1	01/11/2019	One-off system update. NOTE: This may or may not change the GHS classification

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average PC-STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit_\circ IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

- TLV: Threshold Limit Value
- LOD: Limit Of Detection
- OTV: Odour Threshold Value
- BCF: BioConcentration Factors
- BEI: Biological Exposure Index

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