



Material Safety Data Sheet Regulation EC No 1907/2006 Art.31

Product Name: Regin Heat Sink Compound

Product Code: REGZ20

Last Reviewed: October 2021 Next Review Due: October 2026

Regin Products Ltd 8-13 Tower Square, Huntingdon, Cambridgeshire PE29 7DT

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

1.1. Product identifier

Product name: REGZ20 Heat Sink Compound

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

Intended use Silicone grease.

1.3. Details of the supplier of the safety data sheet

Regin Products Ltd

8-13 Tower Square

Huntingdon

Cambridgeshire

PE29 7DT

England

Tel. +44(0)1480 412415

Fax +44(0)1480 457484

e-mail address of the competent person

responsible for the Safety Data Sheet: sales@regin.co.uk

1.4. Emergency telephone number

All other enquiries +44(0)1480 412415 (office hours only)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Hazardous to the aquatic environment, chronic toxicity, category 1

H410 Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: Signal words: Warning Hazard statements:

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

P391 Collect spillage.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification x = Conc. %

Classification 1272/2008 (CLP)

ZINC OXIDE

CAS $1314-13-265 \le x < 69$

Aquatic Chronic 1 H410 M=1

EC 215-222-5

INDEX 030-013-00-7

Reg. no. 01-2119563881-32

POLYSILOXANES

CAS $63148-62-929.5 \le x < 31$

EC

INDEX

AMORPHOUS SILICATE HYDRATE

CAS 7631-86-9 $1 \le x < 1.5$

EC 231-545-4

INDEX

Reg. no. 01-2119379499-16-0134

ETHYL SILICATE

CAS 78-10-4 0 ≤ x < 0.1 Flam. Liq. 3 H226, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335

EC 201-083-8

INDEX 014-005-00-0

Reg. no. 01-2119496195-28

OCTAMETHYLCYCLOTETRASILOXANE

CAS 556-67-2 0 ≤ x < 0.1 Flam. Liq. 3 H226, Repr. 2 H361f, Aquatic Chronic 4 H413

EC 209-136-7

INDEX

Reg. no. 01-2119529238-36

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

No episodes of harm to the staff authorised to use the product have been reported. The following general measures should be adopted as

necessary:

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Do not give anything by

mouth to an unconscious

person.

EYES and SKIN: Wash with plenty of water. In the event of persistent irritation, get medical advice/attention.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray. UNSUITABLE EXTINGUISHING EQUIPMENT None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for

health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of

contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with

self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent

any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency

procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb

the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point

13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the

environment. Do not eat, drink or smoke during use. Wash hands after use.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. Store the containers sealed, in a well ventilated place, away from direct sunlight.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

CZE Česká Republika Nařízení vlády č. 246/2018 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů

DEU Deutschland TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte

DNK Danmark Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019 SECTION 8. Exposure controls/personal protection ... / >>

ESP España LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)

FRA France Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS FIN Suomi HTP-VÄRDEN 2018. Koncentrationer som befunnits skadliga. SOCIAL- OCH HÄLSOVÅRDSMINISTERIETS PUBLIKATIONER 10/2018

HUN Magyarország A pénzügyminiszter 7/2018. (VIII. 29.) PM rendelete a munkahelyek kémiai biztonságáról szóló 25/2000. (IX. 30.) EüM–SZCSM együ, TTes rendelet módosításáról.

NOR Norge Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr.

62 om arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5

NLD Nederland Regeling van de Staatssecretaris van Sociale Zaken en Werkgelegenheid van 13 juli 2018,

2018-0000118517 tot wijziging van de Arbeidsomstandighedenregeling in verband met de implementatie van Richtlijn 2017/164 in Bijlage XIII

PRT Portugal Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018 POL Polska ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r

ROU România HOTĂRÂRE nr. 584 din 2 august 2018 pentru modificarea Hotărârii Guvernului nr. 1.218/2006 privind stabilirea cerințelor minime de securitate și sănătate în muncă pentru asigurarea protecției lucrătorilor împotriva riscurilor legate de prezența agenților chimici

SWE Sverige Hygieniska gränsvärden, AFS 2018:1

SVK Slovensko Nariadenie vlády č. 33/2018 Z. z. Nariadenie vlády Slovenskej republiky, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 355/2006 Z. z. o ochrane zamestnancov pred rizikami súvisiacimi s expozíciou chemickým faktorom pri práci v znení neskorších predpisov

GBR United Kingdom EH40/2005 Workplace exposure limits (Third edition, published 2018)

EU OEL EU Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU)

2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive

2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.

TLV-ACGIH ACGIH 2019

ZINC OXIDE

MAK

DEU

4

Threshold Limit Value

Туре	Country	TWA/8h	STEL/15min	Remarks / Obs	ervations
	mg/m3	3 ppm mg/m3	3 ppm		
TLV	CZE	2	5		Jako Zn
MAK	DEU	2	4	INHAL	
MAK	DEU	0.1	0.4	RESP	
TLV	DNK	4			Som Zn
VLA	ESP	2	10		
VLEP	FRA	5			
HTP	FIN	2	10		
AK	HUN	5			
TLV	NOR	5			
NDS/NDSCh	POL	5	10	INHAL	
TLV	ROU	5	10		Fumuri
NGV/KGV	SWE	5			
NPEL	SVK	1	1	RESP	
TLV-ACGIH		2	10		

Predicted no-effect concentration - PNEC

Normal value in fresh water 0.02 mg/l

Normal value in marine water 0.006 mg/l

Normal value for fresh water sediment 117.8 mg/kg/d

Normal value for marine water sediment 56.5 mg/kg/d

Normal value of STP microorganisms 0.1 mg/l

Normal value for the terrestrial compartment 35.6 mg/kg

Health - Derived no-effect level - DNEL / DMEL

		Effects	on cons	umers	Effects on workers							
Route	of exposure	Acute	Acute		Chroni	Chronic Chronic A		Acute Acute Chr		Chroni	nronic Chronic	
		local	system	ic	local	system	nic	local	systemic	local	systemic	
Oral					VND	0.83						
						mg/kg	bw/d					
Inhalat	tion				VND	2.5				VND	5	
						mg/m3	3 mg/m3					
Skin					VND	83				VND	83	
						mg/kg	bw/d				mg/kg bw/d	
POLYS	ILOXANES											
Thresh	old Limit Value											
Type	Country	TWA/8	h		STEL/1	5min		Remar	ks / Observation	S		
		mg/m3	3	ppm	mg/m3	3	ppm					
TLV	ROU	200			300			SKIN				
AMOR	PHOUS SILICATE	HYDRA	ΓΕ									
Thresh	old Limit Value											
Type	Country	TWA/8	h		STEL/1	5min		Remar	ks / Observation	S		
		mg/m3	3	ppm	mg/m3	3	ppm					
AGW	DEU	4						INHAL				

INHAL

Health	Health - Derived no-effect level - DNEL / DMEL												
Effects on consumers						Effects	on workers						
Route of exposure		Acute	Acute	Chroni	c Chronic	Acute	Acute	Chroni	c Chronic				
local	systemic	local	systemic	local	systemic	local	systemic	local	systemic				

local	systemic	local	systemic	local	systemic	local	systemic	local	systemic
Inhalat	ion					4	VND	4	VND
						mg/m	3	mg/m	3

ETHYL SILICATE Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	44	5.06	200	23	
AGW	DEU	12	1.4	12 (C)	1.4 (C)	
MAK	DEU	86	10	86	10	
TLV	DNK	44	5			E
VLEP	FRA	85	10			
HTP	FIN	43	5	86	10	
AK	HUN	44				
TLV	NOR	44	5			
TGG	NLD	44				
VLE	PRT	44	5			
NDS/N	IDSCh POL	44				
TLV	ROU	44	5			
NPEL	SVK	44	5			
WEL	GBR	44	5			
OEL	EU	44	5			
TLV-AC	CGIH	85	10			
Dun alia		tt DNI	F.C			

Predicted no-effect concentration - PNEC

Normal value in fresh water 0.19 mg/l

Normal value in marine water 0.019 mg/l

Normal value for fresh water sediment 0.83 mg/kg

Normal value for marine water sediment 0.083 mg/kg

Normal value of STP microorganisms 4000 mg/l

Normal value for the terrestrial compartment 0.05 mg/kg

Health - Derived no-effect level - DNEL / DMEL

Effects on consumers Effects on workers

Route of exposure	Acute	Acute	Chroni	c Chronic	Acute	Acute	Chronic Chronic	
local systemic	local	systemic	local	systemic	local	systemic	local	systemic
Inhalation			25	25			85	85
			mg/m3	3 mg/m3			mg/m3	3 mg/m3
Skin			VND	8.4			VND	12.1
			mg/kg	bw/d				mg/kg
								bw/d

OCTAMETHYLCYCLOTETRASILOXANE

Thres	:hold	Limit	V/al	lue

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3 ppm	mg/m3 ppm	
OFI	FU	10		RESP

Predicted no-effect concentration - PNEC

Normal value in marine water 0.044 mg/l
Normal value for fresh water sediment 0.128 mg/kg
Normal value of STP microorganisms 100 mg/l
Normal value for the terrestrial compartment 0.16 mg/kg

Health - Derived no-effect level - DNEL / DMEL

Effects on consumers Effects on workers

Route of exposure		Acute	Acute	Chronic Chronic		Acute	Acute	Chroni	c Chronic	
	local	systemic	local	systemic	local	systemic	local	systemic	local	systemic
Inhalation		61	305	61	305					
		mg/m3	3 mg/m3	mg/m3	3 mg/m3					

Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available; NEA = no exposure expected; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited. If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties Value Information

Appearance paste Colour white

Odour characteristic Odour threshold Not available Not available рΗ Melting point / freezing point Not available Initial boiling point Not available **Boiling range** Not available > 150 °C Flash point **Evaporation Rate** Not available Flammability of solids and gases Not available Lower inflammability limit Not available Upper inflammability limit Not available Lower explosive limit Not available Not available Upper explosive limit Vapour pressure Not available

Relative density 2.3

Solubility immiscible with water

Partition coefficient: n-octanol/water Not available
Auto-ignition temperature > 400 °C
Decomposition temperature Not available

Viscosity paste

Explosive properties Not available Oxidising properties Not available

9.2. Other information

Vapour density

VOC (Directive 2010/75/EC) : 0.51 % - 11.71 g/litre VOC (volatile carbon) : 0.11 % - 2.53 g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

Not available

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:

ATE (Oral) of the mixture:

Not classified (no significant component)

Not classified (no significant component)

Not classified (no significant component)

ETHYL SILICATE

LD50 (Oral) > 2500 mg/kg (Rat) LD50 (Dermal) > 2000 mg/kg (Rat)

AMORPHOUS SILICATE HYDRATE

 LD50 (Oral)
 > 2000 mg/kg Rat

 LD50 (Dermal)
 > 2000 mg/kg Rat

 LC50 (Inhalation)
 > 2.2 mg/l/1h Rat

POLYSILOXANES

LD50 (Dermal) > 2000 mg/kg (Rat)

ZINC OXIDE

LD50 (Oral) > 5000 mg/kg (rat)

OCTAMETHYLCYCLOTETRASILOXANE

LC50 (Inhalation) 2975 ppm/4h

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

This product is dangerous for the environment and highly toxic for aquatic organisms. In the long term, it have negative effects on aquatic

environment.

12.1. Toxicity

ETHYL SILICATE

EC50 - for Crustacea > 193 mg/l/48h (Desmodesmus subspicatus green algae)

ZINC OXIDE

Chronic NOEC for Crustacea 0.082 mg/l Daphnia magna

Chronic NOEC for Algae / Aquatic Plants 0.019 mg/l

12.2. Persistence and degradability

ETHYL SILICATE

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

AMORPHOUS SILICATE HYDRATE

Solubility in water 0,1 - 100 mg/l

Degradability: information not available

ZINC OXIDE

Solubility in water 2.9 mg/l

NOT rapidly degradable

12.3. Bioaccumulative potential

ETHYL SILICATE

Partition coefficient: n-octanol/water 3.18 BCF 3.16

AMORPHOUS SILICATE HYDRATE

Partition coefficient: n-octanol/water 0.53

ZINC OXIDE

BCF > 175

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product

should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA: 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not

submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity ≤ 5Kg or

5L, is not submitted to IMDG Code provisions.

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to

IATA dangerous goods regulations.

14.2. UN proper shipping name

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINCO OSSIDO)

 ${\sf IMDG:ENVIRONMENTALLY\ HAZARDOUS\ SUBSTANCE,\ LIQUID,\ N.O.S.\ (ZINC\ OXIDE)}$

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE)

14.3. Transport hazard class(es)

ADR / RID: Class: 9 Label: 9

IMDG: Class: 9 Label: 9

IATA: Class: 9 Label: 9 14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID: Environmentally Hazardous

IMDG: Marine Pollutant

IATA: Environmentally Hazardous

14.6. Special precautions for user

ADR / RID: HIN - Kemler: 90 Limited Quantities: 5 L Tunnel restriction code: (-)

Special Provision: -

IMDG: EMS: F-A, S-F Limited Quantities: 5 L

IATA: Cargo: Maximum quantity: 450 L Packaging instructions: 964
Pass.: Maximum quantity: 450 L Packaging instructions: 964

Special Instructions: A97, A158, A197

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

SECTION 15. Regulatory information

Austrailia AICS: On or in compliance with the inventory.

Canada DSL Inventory List: On or in compliance with the inventory.

EINECS, ELINCS or NLP: On or in compliance with the inventory.

China Inv. Existing Chemical Substances: On or in compliance with the inventory.

Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory.

Philippines PICCS: On or in compliance with the inventory.

US TSCA Inventory: On or in compliaince with the inventory.

New Zealand Inventory of Chemicals: On or in compliance with the inventory. Taiwan Chemical Substance Inventory: On or in compliance with the inventory.

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

Seveso Category - Directive 2012/18/EC: E1

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3 - 40

Substances in Candidate List (Art. 59 REACH)

OCTAMETHYLCYCLOTETRASILOXANE

Reg. no.: 01-2119529238-36

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Information not available

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 2: Hazard to waters

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3 Flammable liquid, category 3
Repr. 2 Reproductive toxicity, category 2

Acute Tox. 4 Acute toxicity, category 4
Eye Irrit. 2 Eye irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 4 Hazardous to the aquatic environment, chronic toxicity, category 4

H226 Flammable liquid and vapour.
H361f Suspected of damaging fertility.

H332 Harmful if inhaled.

H319 Causes serious eye irritation.H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

LEGEND:- ADR: European Agreement concerning the carriage of Dangerous goods by Road

- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
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- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
- 16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety

- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current

health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

SECTION 16. Other information ... / >>

CALCULATION METHODS FOR CLASSIFICATION Chemical and physical hazards: Product classification derives from criteria established

by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

03 / 08 / 09 / 12 / 15 / 16