Printing date 17.07.2021

CHEMICALS, INC.

Revision: 17.07.2021

SECTION 1 :	
• 1.1 Product ide	ntifier
• Trade name: Z	nc oxide (99.9995%-Zn) PURATREM
	0-3018 antified uses of the substance or mixture and uses advised against ant information available.
1.3 Details of th Manufacturer/S Strem Chemical 7 Mulliken Way NEWBURYPOH USA info@strem.com	s, Inc. T, MA 01950
	ation obtainable from: Technical Department
	telephone number:
	CHEMTREC: + 1 (800) 424-9300 opening times: +1 (978) 499-1600
	on of the substance or mixture
• Classification a The product is r	ccording to Regulation (EC) No 1272/2008 ot classified according to the CLP regulation.
Classification a The product is r 2.2 Label eleme Labelling accor Hazard pictogra Signal word Vo Hazard stateme Precautionary s P262 P280 P305+P351+P. P403+P233 P501 2.3 Other hazar Results of PBT PBT: Not appli	<pre>ccording to Regulation (EC) No 1272/2008 ot classified according to the CLP regulation. nts ding to Regulation (EC) No 1272/2008 Void ums Void id nts Void tatements Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. 338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container in accordance with local/regional/national/internatio regulations. ds and vPvB assessment cable.</pre>
Classification a The product is r 2.2 Label eleme Labelling accor Hazard pictogra Signal word Vo Hazard stateme Precautionary s P262 P280 P305+P351+P. P403+P233 P501 2.3 Other hazar Results of PBT PBT: Not appli	<pre>ccording to Regulation (EC) No 1272/2008 ot classified according to the CLP regulation. nts ding to Regulation (EC) No 1272/2008 Void ums Void id nts Void tatements Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. 338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container in accordance with local/regional/national/internatio regulations. ds and vPvB assessment cable.</pre>
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SECTION 4: First aid measures

- 4.1 Description of first aid measures
- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- \cdot 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- · 6.2 Environmental precautions: No special measures required.
- 6.3 Methods and material for containment and cleaning up: Dispose contaminated material as waste according to item 13.
- · 6.4 Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling No special measures required.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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• Additional information: The lists valid during the making were used as basis.

- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:
- The usual precautionary measures are to be adhered to when handling chemicals.
- · Respiratory protection: Not required.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation \cdot *Material of gloves*

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product 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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Safety glasses

 9.1 Information on basic physical and ch General Information 	hemical properties
· General Information · Appearance:	
Form:	Powder
Colour:	White
· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gas):	Product is not flammable.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not applicable.
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not applicable.
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· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
water:	Insoluble.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Organic solvents:	0.0 %	
VOC(EC)	0.00 %	
• 9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

- Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- \cdot Germ cell mutagenicity Based on available data, the classification criteria are not met.
- \cdot Carcinogenicity Based on available data, the classification criteria are not met.
- *Reproductive toxicity Based on available data, the classification criteria are not met.*
- STOT-single exposure Based on available data, the classification criteria are not met.
- $\cdot \textit{STOT-repeated exposure Based on available data, the classification criteria are not met.}$
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Not known to be hazardous to water.

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· 12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

· 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation Disposal must be made according to official regulations.

• Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport informa	tion
14.1 UN-Number ADR, ADN, IMDG, IATA	not regulated
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	not regulated
14.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA Class	not regulated
14.4 Packing group ADR, IMDG, IATA	not regulated
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Ann Marpol and the IBC Code	nex II of Not applicable.
UN "Model Regulation":	not regulated

SECTION 15: Regulatory information

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

· Directive 2012/18/EU

- · Named dangerous substances ANNEX I None of the ingredients is listed.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Technical Department.
- · Contact: Technical Director
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances	(Contd. of page 5)
CAS: Chemical Abstracts Service (division of the American Chemical Society)	
VOC: Volatile Organic Compounds (USA, EU)	
PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative	