

Product name: KOSMOS T 12 N

SAFETY DATA SHEET

Classified in accordance with Health Canada Hazardous Products Regulations
(SOR/2015-17)

1. Identification

Product identifier:
KOSMOS T 12 N

Chemical name:
Dibutyl tin dilaurate

Recommended use of the chemical and restrictions on use

Recommended use: Industrial use
Recommended restrictions: None known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Canada Inc.
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Canada

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E-mail : product-regulatory-services@evonik.com

Emergency telephone number:

24-Hour Health Emergency : +1 800 424 9300 (CHEMTREC - US & CANADA)
800 681 9531 (CHEMTREC MEXICO)
+1 703 527 3887 (CHEMTREC WORLD)
+1 613 996 6666 (CANUTEC – For Transportation Emergencies Only)
+1 973 929 8060 (Product Regulatory Services)

2. Hazard identification

According to Hazardous Products Regulations

Health Hazards

Serious Eye Damage/Eye Irritation	Category 2A
Skin sensitizer	Category 1
Germ Cell Mutagenicity	Category 1B
Reproductive toxicity	Category 1B
Specific Target Organ Toxicity - Single Exposure	Category 1
Specific Target Organ Toxicity - Repeated Exposure	Category 1

Environmental Hazards

Acute hazards to the aquatic environment	Category 1
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Chronic hazards to the aquatic environment

Category 1

Label Elements

Hazard Symbol:



Signal Word:

Danger

Hazard Statement:

Causes serious eye irritation.
May cause an allergic skin reaction.
May cause genetic defects.
Causes damage to organs.
Causes damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label). Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Call a POISON CENTER/doctor. Collect spillage.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Physical Hazards Not Otherwise Classified:

Classification not possible

Health Hazards Not Otherwise Classified:

Classification not possible

3. Composition/information on ingredients

Product name: KOSMOS T 12 N
Chemical name:
 Dibutyl tin dilaurate

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)* Reference quantity: Fraction (Weight)
Dibutyltin dilaurate	No data available.	77-58-7	90 - <100%

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

4. First-aid measures
Description of necessary first-aid measures

General information:	Remove soiled or soaked clothing immediately Symptoms of poisoning may appear several hours later. Keep under medical supervision for at least 48 hours.
Inhalation:	fresh air supply, consult a doctor if feeling unwell.
Skin Contact:	In case of contact with skin wash off with soap and water. Get medical attention immediately.
Eye contact:	In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice
Ingestion:	Thoroughly clean the mouth with water Call for medical advice immediately; show this safety data sheet
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	corrosive effects sensitising effects toxic effects for reproduction mutagenic effects
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

General Fire Hazards:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Suitable (and unsuitable) extinguishing media	
Suitable extinguishing media:	foam, carbon dioxide, dry powder, water spray.
Unsuitable extinguishing media:	High volume water jet.

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Special hazards arising from the substance or mixture:

In the event of fire the following can be released: - carbon dioxide, carbon monoxide - Tin oxide Under certain conditions of combustion traces of other toxic substances cannot be excluded

Special protective equipment and precautions for fire-fighters
Special fire-fighting procedures:

No specific precautions.

Special protective equipment for fire-fighters:

Do not inhale explosion and/or combustion gases. Self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Ensure adequate ventilation.

Accidental release measures:

No data available.

Methods and material for containment and cleaning up:

Take up with absorbent material (eg sand, kieselguhr, universal binder) Dispose of absorbed material in accordance with the regulations.

Environmental Precautions:

Do not allow to enter drains or waterways Prevent product from getting into subsoil/soil.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):

No data available.

Safe handling advice:

Avoid contact with skin and eyes. Do not inhale gases/vapours/aerosols. Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid formation of aerosol.

Contact avoidance measures:

No data available.

Storage

Safe storage conditions:

Keep container tightly closed in a cool, well-ventilated place. Do not store or transport together with foodstuffs

Safe packaging materials:

No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
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Product name: KOSMOS T 12 N

Dibutyltin dilaurate - as Sn	TWA		0.1 mg/m ³	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended
	STEL		0.2 mg/m ³	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended
Dibutyltin dilaurate - as Sn	STEL		0.2 mg/m ³	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended)
	TWA		0.1 mg/m ³	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended)
Dibutyltin dilaurate - as Sn			0.1 mg/m ³	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended
			0.2 mg/m ³	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended
Dibutyltin dilaurate - as Sn	TWA		0.1 mg/m ³	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended
Dibutyltin dilaurate - as Sn	8 HR ACL		0.1 mg/m ³	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended
	15 MIN ACL		0.2 mg/m ³	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended
Dibutyltin dilaurate - as Sn	STEL		0.2 mg/m ³	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended
	TWA		0.1 mg/m ³	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended
Dibutyltin dilaurate - as Sn	STEL		0.2 mg/m ³	US. ACGIH Threshold Limit Values, as amended
	TWA		0.1 mg/m ³	US. ACGIH Threshold Limit Values, as amended
Dibutyltin dilaurate - as Sn	REL		0.1 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment
Eye/face protection:

Tightly fitting safety goggles

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Hand Protection:	Material: gloves made of natural latex Break-through time: > 60 min Additional Information: The protective gloves to be worn must satisfy the specifications of Regulation (EU) 2016/425 and the resulting Standard EN374., Specific workplace situations must be considered separately. Material: gloves made of natural latex Break-through time: > 120 min Material: gloves made of chloroprene (CR, e.g. Neoprene) Break-through time: > 480 min Material: gloves made of nitril (NBR) Break-through time: > 480 min Material: gloves made of butyl (IIR) Break-through time: > 480 min
Other:	protective clothing
Respiratory Protection:	in case of formation of vapours/aerosols: Short term: filter apparatus, combination filter A-P2
Hygiene measures:	Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Remove soiled or soaked clothing immediately.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	yellowish
Odor:	Characteristic
Odor Threshold:	not measured
Freezing point:	61 - 64 °F/16 - 18 °C (DIN/ISO 3016)
Boiling Point:	> 392 °F/> 200 °C
Flammability:	No data available.

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:	Not applicable
Explosive limit - lower:	Not applicable
Flash Point:	> 356 °F/> 180 °C (DIN EN 22719)
Self Ignition Temperature:	not measured
Decomposition Temperature:	not measured
pH:	Not determined.

Viscosity

Dynamic viscosity:	30 mPa.s (68 °F/20 °C, DIN 53019)
Kinematic viscosity:	No data available.
Flow Time:	No data available.

Solubility(ies)

Solubility in Water:	Sparingly Soluble
Solubility (other):	not measured
Partition coefficient (n-octanol/water):	not measured

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Vapor pressure:	not measured
Relative density:	No data available.
Density:	1.03 g/cm ³ (68 °F/20 °C) (DIN 51757)
Bulk density:	No data available.
Relative vapor density:	not measured

Other information

Explosive properties:	no danger of explosion
Oxidizing properties:	not measured
Minimum ignition temperature:	not measured
Metal Corrosion:	not measured
Evaporation Rate:	No data available.

10. Stability and reactivity

Reactivity:	see section "Possibility of hazardous reactions".
Chemical Stability:	The product is stable under normal conditions.
Possibility of hazardous reactions:	No hazardous reactions with proper storage and handling
Conditions to avoid:	Unknown
Incompatible Materials:	Unknown
Hazardous Decomposition Products:	None with proper storage and handling.

11. Toxicological information**Information on toxicological effects****Information on likely routes of exposure**

Inhalation:	If handled correctly, not a relevant route of exposure. Information on effects are given below.
Skin Contact:	Relevant route of exposure. Information on effects are given below.
Eye contact:	Relevant route of exposure. Information on effects are given below.
Ingestion:	If handled correctly, not a relevant route of exposure. Information on effects are given below.

Acute toxicity (list all possible routes of exposure)

Oral	
Product:	LD 50 (Rat): 2,071 mg/kg (OECD 401)
Dermal	
Product:	LD 50 (Rat): > 2,000 mg/kg (OECD 402)
Inhalation	
Product:	Not classified for acute toxicity based on available data.

Repeated dose toxicity

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Product: No data available.**Skin Corrosion/Irritation****Product:** not corrosive non- corrosive; Based on available data, the classification criteria are not met.**Serious Eye Damage/Eye Irritation****Product:** Causes serious eye irritation. Rabbit: Severely irritating to eyes.**Respiratory or Skin Sensitization****Product:** , OECD 406 (Guinea Pig)Sensitising**Carcinogenicity****Product:** Based on available data, the classification criteria are not met.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogens present or none present in regulated quantities

ACGIH: US.ACGIH Threshold Limit Values:

No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogens present or none present in regulated quantities

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended

No carcinogens present or none present in regulated quantities

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended

No carcinogens present or none present in regulated quantities

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

Category 1B Mutagen.

In vitro**Product:** No data available.**Components:**

Dibutyltin dilaurate Ames test (OECD 471): negative

In vivo**Product:** No data available.**Reproductive toxicity****Product:** May damage fertility. May damage the unborn child.**Specific Target Organ Toxicity - Single Exposure****Product:** thymus gland - Causes damage to organs.**Specific Target Organ Toxicity - Repeated Exposure****Product:** thymus gland - Causes damage to organs through prolonged or repeated exposure.**Aspiration Hazard****Product:** Not classified**Information on health hazards****Other hazards**

Product name: KOSMOS T 12 N**Product:** None known.;**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** LC 50 (Zebra Fish, 96 h): 3.1 mg/l**Aquatic Invertebrates****Product:** EC 50 (Daphnia magna, 48 h): 463 µg/l**Toxicity to Aquatic Plants****Product:** EC 50 (Desmodesmus subspicatus (green algae), 72 h): > 1 mg/l (OECD 201)**Toxicity to microorganisms****Product:** No data available.**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** No data available.**Toxicity to microorganisms****Product:** No data available.**Persistence and Degradability****Biodegradation****Product:** No data available.**Components:**

Dibutyltin dilaurate 23 % (39 d, OECD 301 F) The product is not biodegradable., anaerobic

BOD/COD Ratio**Product:** No data available.**Bioaccumulative potential****Bioconcentration Factor (BCF)****Product:** No data available.**Partition Coefficient n-octanol / water (log Kow)****Product:** Log Kow: not measured**Mobility in soil:****Product** No data available.**Results of PBT and vPvB assessment:**

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Product This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Other adverse effects:

Other hazards

Product: Do not allow to enter soil, waterways or waste water canal.

13. Disposal considerations

Disposal methods: In accordance with local authority regulations, take to special waste incineration plant

Contaminated Packaging: If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

14. Transport information

Domestic regulation

TDG

UN number or ID number : UN 3082
 Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibutyl tin dilaurate)
 Class : 9
 Packing group : III
 Labels : 9
 Marine pollutant : yes

International Regulations

IATA-DGR

UN/ID No. : UN 3082
 Proper shipping name : Environmentally hazardous substance, liquid, n.o.s. (Dibutyl tin dilaurate)
 Class : 9
 Packing group : III
 Labels : 9MI
 Packing instruction (cargo aircraft) : 964
 Packing instruction (passenger aircraft) : 964
 Environmentally hazardous : yes

IMDG-Code

UN number or ID number : UN 3082
 Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibutyl tin dilaurate)
 Class : 9
 Packing group : III
 Labels : 9
 EmS Code : F-A, S-F
 Marine pollutant : yes
 Remarks : IMDG Code segregation group 7 - Heavy metals and their salts (incl. their organometallic compounds)

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. Regulatory information

Canada Federal Regulations

List of Toxic Substances (CEPA, Schedule 1)

Chemical Identity

Bis(tributyltin) oxide

Export Control List (CEPA 1999, Schedule 3)

Chemical Identity

Bis(tributyltin) oxide

National Pollutant Release Inventory (NPRI)

Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements

NPRI PT5	Not Regulated
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Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)

NPRI	Not Regulated
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Greenhouse Gases

Not Regulated

Canada. Substances Subject to Significant New Activity (SNAc) Reporting Requirements

Not Regulated

Controlled Drugs and Substances Act

CA CDSI	Not Regulated
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CA CDSII	Not Regulated
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CA CDSIII	Not Regulated
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CA CDSIV	Not Regulated
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CA CDSV	Not Regulated
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CA CDSVII	Not Regulated
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CA CDSVIII	Not Regulated
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Precursor Control Regulations

Not Regulated

Inventory Status:

Canada DSL Inventory List:	Included on Inventory.	
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16. Other information, including date of preparation or last revision**Issue Date:** 08/05/2022**Version #:** 1.0**Further Information:** No data available.**Revision Information:** Changes since the last version are highlighted in the margin. This version replaces all previous versions.**Disclaimer:** This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.