

# **Safety Data Sheet**

Canada

Section 1. Identification

Product name Oligosynt™ dA 40s 30, 5 x 30 µmole

**Catalogue Number** 17-5210-02

**Product type** Liquid.

#### Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Analytical chemistry. Use in laboratories Scientific research and development

Supplier Cytiva

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In case of emergency ChemTrec (US) 1-703-527-3887

## Section 2. Hazard identification

Classification of the substance or mixture

FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 3
ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 3 EYE IRRITATION - Category 2A

## **GHS label elements**

**Hazard pictograms** 







Signal word Danger

Highly flammable liquid and vapor. **Hazard statements** 

Toxic if swallowed or if inhaled. Harmful in contact with skin. Causes serious eye irritation.

**Precautionary statements** 

Prevention Wear protective gloves. Wear protective clothing. Wear eye or face protection. Keep away from

heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Do not eat, drink or smoke when using this

product. Wash hands thoroughly after handling.

Response IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. 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 attention.

Storage Store locked up.

Disposal Dispose of contents and container in accordance with all local, regional, national and international

regulations.

# Section 3. Composition/information on ingredients

Substance/mixture Mixture

Other means of identification Not available.

#### CAS number/other identifiers

CAS number Not applicable.

 Ingredient name
 % (w/w)
 CAS number

 Acetonitrile
 70 - 85
 75-05-8

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First-aid measures

## **Description of necessary first aid measures**

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check

for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected

that furnes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may

need to be kept under medical surveillance for 48 hours.

**Skin contact** Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash

contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly

before reuse.

**Ingestion** Get medical attention immediately. Call a poison center or physician. Wash out mouth with water.

Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Most important symptoms/effects, acute and delayed

## Potential acute health effects

**Eye contact** Causes serious eye irritation.

**Inhalation** Toxic if inhaled.

**Skin contact** Harmful in contact with skin.

**Ingestion** Toxic if swallowed.

#### Over-exposure signs/symptoms

Eye contact Adverse symptoms may include the following:

pain or irritation watering

redness

Inhalation No specific data.

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Skin contactNo specific data.IngestionNo specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed

person may need to be kept under medical surveillance for 48 hours.

Specific treatments No specific treatment.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. If it is suspected

that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

#### See toxicological information (Section 11)

# Section 5. Fire-fighting measures

## **Extinguishing media**

Suitable extinguishing media

Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

Unsuitable extinguishing

media

Do not use water jet.

Specific hazards arising from

the chemical

Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent

explosion

Hazardous thermal decomposition products

Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides

Special protective actions for

fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus

Special protective equipment for fire-fighters

(SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** 

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

## Methods and materials for containment and cleaning up

Small spill Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-

proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of

via a licensed waste disposal contractor.

Large spill Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-

proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact

information and Section 13 for waste disposal.

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# Section 7. Handling and storage

#### Precautions for safe handling

#### Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

# Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

# Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 4 to 30°C (39.2 to 86°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

#### Control parameters

#### Occupational exposure limits

Ingredient name Acetonitrile

#### **Exposure limits**

CA Alberta Provincial (Canada, 6/2018). Skin sensitizer.

8 hrs OEL: 34 mg/m³ 8 hours. 8 hrs OEL: 20 ppm 8 hours.

CA British Columbia Provincial (Canada, 7/2018). Absorbed through skin.

TWA: 20 ppm 8 hours.

CA Ontario Provincial (Canada, 1/2018).

Absorbed through skin. TWA: 20 ppm 8 hours.

CA Quebec Provincial (Canada, 1/2014).

STEV: 101 mg/m³ 15 minutes. STEV: 60 ppm 15 minutes. TWAEV: 67 mg/m³ 8 hours. TWAEV: 40 ppm 8 hours.

CA Saskatchewan Provincial (Canada, 7/2013).

Absorbed through skin. STEL: 30 ppm 15 minutes. TWA: 20 ppm 8 hours.

# Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

# Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels

# **Individual protection measures**

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

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Skin protection

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn at all

times when handling chemical products if a risk assessment indicates this is necessary.

Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting

of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** Personal protective equipment for the body should be selected based on the task being performed

and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection Appropriate footwear and any additional skin protection measures should be selected based on the

task being performed and the risks involved and should be approved by a specialist before handling

this product.

Respiratory protection Based on the hazard and potential for exposure, select a respirator that meets the appropriate

standard or certification. Respirators must be used according to a respiratory protection program to

ensure proper fitting, training, and other important aspects of use.

# Section 9. Physical and chemical properties

#### **Appearance**

Physical state Liquid. [(White suspension in closed column.)] Color solution: Colorless. / Suspension.: White.

Odor Ethereal. / Sweetish.

40 ppm Odor threshold

Not applicable **Melting point** Not available. **Boiling point** Not available.

Flash point Closed cup: 15 to 20°C (59 to 68°F)

**Evaporation rate** Not available Not available Flammability (solid, gas) Not available. Lower and upper explosive

(flammable) limits

Vapor pressure Not available

Vapor density Not available. Relative density Not available. Solubility Not available.

Partition coefficient: n-octanol/

water

Not available.

**Auto-ignition temperature** Not available. **Decomposition temperature** Not available. Viscosity Not available. Flow time (ISO 2431) Not available.

# Section 10. Stability and reactivity

Reactivity No specific test data related to reactivity available for this product or its ingredients.

Chemical stability The product is stable.

Possibility of hazardous

reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder,

drill, grind or expose containers to heat or sources of ignition.

Incompatible materials Reactive or incompatible with the following materials:

oxidizing materials

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition products should not be

produced.

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# Section 11. Toxicological information

#### Information on toxicological effects

#### **Acute toxicity**

**Species** Product/ingredient name Result Dose **Exposure** LC50 Inhalation Gas. 17100 ppm 4 hours Acetonitrile Rat LD50 Dermal Rabbit 980 mg/kg I D50 Oral Rat 2460 mg/kg

#### Irritation/Corrosion

Not available.

#### **Sensitization**

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

## **Aspiration hazard**

Not available.

Information on the likely routes

Routes of entry anticipated: Oral, Dermal, Inhalation.

of exposure

# Potential acute health effects

**Eye contact** Causes serious eye irritation.

**Inhalation** Toxic if inhaled.

**Skin contact** Harmful in contact with skin.

**Ingestion** Toxic if swallowed.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** Adverse symptoms may include the following:

pain or irritation watering redness

InhalationNo specific data.Skin contactNo specific data.IngestionNo specific data.

# Delayed and immediate effects and also chronic effects from short and long term exposure

# Short term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Long term exposure

Potential immediate effects Not available.

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Potential delayed effects Not available.

#### Potential chronic health effects

Not available.

GeneralNo known significant effects or critical hazards.CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

#### **Numerical measures of toxicity**

## **Acute toxicity estimates**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Oligosynt - Primer Support w Acetonitrile - GROUP Acetonitrile	129	1419.4	N/A	3.9	N/A
	100	1100	N/A	3	N/A

# Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Acetonitrile	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 3600000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 160000 ug/l Fresh water	Daphnia - Daphnia magna	21 davs

## Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Acetonitrile	-	98%; 28 day(s)	Readily

## **Bioaccumulative potential**

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Acetonitrile	-0.34	0.3 to 0.4	low

## Mobility in soil

**Soil/water partition coefficient** Not available. **(Koc)** 

Other adverse effects No known significant effects or critical hazards.

# Section 13. Disposal considerations

# **Disposal methods**The generation of waste should be avoided or minimized wherever possible. Disposal of this

product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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# Section 14. Transport information

**TDG Classification DOT Classification** ADR/RID **IMDG** IATA **UN** number UN1648 UN1648 UN1648 UN1648 UN1648 Acetonitrile mixture **UN** proper Acetonitrile mixture Acetonitrile mixture Acetonitrile mixture Acetonitrile mixture shipping name **Transport hazard** 3 3 3 3 class(es) Ш Packing group Ш Ш Environmental No. No. No. No. No. hazards Additional Product classified as Reportable quantity per the following information 6451.6 lbs / 2929 kg. sections of the Package sizes Transportation of shipped in quantities Dangerous Goods less than the product Regulations: reportable quantity 2.18-2.19 (Class 3). are not subject to the RQ (reportable quantity) transportation

Special precautions for user

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code Not available.

requirements.

# Section 15. Regulatory information

## **Canadian lists**

Canadian NPRI The following components are listed: Acetonitrile

#### **International regulations**

## Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

# Montreal Protocol

Not listed.

# Stockholm Convention on Persistent Organic Pollutants

Not listed.

## Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

# **Inventory list**

Canada Not determined.

Europe All components are listed or exempted.

United States All components are listed or exempted.

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## Section 16. Other information

#### **History**

Date of printing5/6/2020Date of issue/Date of revision3/6/2020Date of previous issue1/19/2017

Version 4

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**Key to abbreviations**ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HPR = Hazardous Products Regulations IATA = International Air Transport Association IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified

by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available UN = United Nations

## Procedure used to derive the classification

Classification Justification

FLAMMABLE LIQUIDS - Category 2

ACUTE TOXICITY (oral) - Category 3

Calculation method
ACUTE TOXICITY (dermal) - Category 4

ACUTE TOXICITY (inhalation) - Category 3

Calculation method
EYE IRRITATION - Category 2A

Calculation method

References Not available.

Indicates information that has changed from previously issued version.

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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