# SAFETY DATA SHEET

## 1. Product and Company Identification

Product identifier	BIOPLUS		
Other means of identification	Not available		
Recommended use	Dishwashing detergent		
Recommended restrictions	None known. Unica Canada inc. 90, J.A. Bombardier Boucherville, (Quebec) Phone: (450) 655-8168 Emergency Phone (CANUTEC 24 H, Emergency only) : (613) 996-6666		
Manufacturer			
	2. Hazards Id	entification	
GHS classification in accordance	ce with : (CAN) WHMIS 2015		
Physical hazards	Not classified		
Health hazards	Eye damage/irritation	Category 2B	
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Signal word			
	Warning		
Hazard statement	Causes eye irritation		
Precautionary statement			
Prevention	Wash hands thoroughly after ha	ndling.	

## 3. Composition/Information on Ingredients

Mixture
Chemical name
Sodium dodecylbenzenesulfonate

Common name and synonyms

CAS number 68081-81-2 % 15 - 40

4. First Aid Measures		
Inhalation	Not dangerous	
Skin contact	If on skin (or hair): Rinse skin with water/shower. Wash contaminated clothing before reuse. Specific treatment (see product label). Immediately call a poison center/doctor/.	
Eye contact	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.	
Ingestion	If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center/doctor/.	
Most important	Not available	
symptoms/effects, acute and delayed	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.	
Indication of immediate medical attention and special treatment needed General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Wear rubber gloves and chemical splash goggles. Keep out of reach of children.	

## 5. Fire Fighting Measures

Suitable extinguishing media	Treat for surrounding material.	
Unsuitable extinguishing media	Use appropriate extinguisher, as surrounding material.	
Specific hazards arising from the chemical	Firefighters should wear a self-contained breathing apparatus.	
Special protective equipment and precautions for	Firefighters should wear full protective clothing including self contained breathing apparatus.	
firefighters Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.	
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.	
Hazardous combustion products	May include and are not limited to: Carbone dioxyde	
Explosion data		
Sensitivity to mechanical impact	Not available.	
Sensitivity to static discharge	Not available.	
6. Accidental Release Measures		
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.	
Methods and materials for	Should not be released into the environment.	
containment and cleaning up	Large Spills: Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water	
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.	
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewers, basements or confined areas.	
Environmental precautions	Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.	
	7. Handling and Storage	
Precautions for safe handling	Use only with adequate ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. Avoid breathing vapors or mists of this product. DO NOT get in eyes, on skin or clothing.	

## 8. Exposure Controls/Personal Protection

#### **Occupational exposure limits**

<b>Components</b> Sodium dodecylbenzenesulfo	Value onate Not available
Biological limit values Appropriate engineering	No biological exposure limits noted for the ingredient(s).
controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures	, such as personal protective equipment
Eye/face protection	Chemical splash goggles.
Skin protection	
Hand protection	Chemical resistant gloves. Confirm with a reputable supplier first.
Other	Wear appropriate chemical resistant clothing. As required by employer code. Where exposure
Respiratory protection	guideline levels may be exceeded, use an approved NIOSH respirator. Not applicable.
Thermal hazards General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Wash hands before breaks and immediately after handling the product.

#### 9. Physical and Chemical Properties

Appearance	Clear
Physical state	Liquid.
Form	Liquid
Color	Orange
Odor	Citrus (Orange)
Odor threshold	Not available.
рН	8.0 - 8.5
Melting point/freezing point	O°O
Initial boiling point and boiling range	100 °C
Pour point	Not available.
Partition coefficient (n-octanol/water)	Not available
Flash point	> 95 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable.

#### Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available	
Flammability limit - upper (%)	Not available	
Explosive limit - lower (%)	Not available.	
Explosive limit - upper (%)	Not available.	
Vapor pressure	Not available	
Vapor density	Not available	
Relative density	1.02 – 1.04	
Solubility(ies)	Complete	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available.	
Viscosity	Not available.	
10. Stability and Reactivity		
Reactivity	Strong bases and strong acids. This product may react with	

Reactivity	Strong bases and strong acids. This product may react with
Possibility of hazardous reactions	oxidizing agents. Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Reacts with strong bases and strong acids. This product may react with oxidizing
Incompatible materials	agents.
Hazardous decomposition	Oxidizing agents. Bases
products	May include and are not limited to: Carbon oxide

## 11. Toxicological Information

Routes of exposure	•			
Information on likely routes of exposure				
Ingestion	Causes digestive tract irritation.			
Inhalation	Prolonged inhalation may be harmful.			
Skin contact	Causes skin irritation.			
Eye contact	Causes eye irritation.			
Symptoms related to the physical, chemical and toxicological characteristics Information on toxicological ef	Nothing fects			

Conjunctival oedema value Not available.

Not available.

**Recover days** 

#### Acute toxicity

<b>Components</b> Sodium dodecylbenzenesulfo	Species onate	Test Results
<b>Acute</b> DermalDL50 Oral DL50	Rabbit Rat	> 2000 mg/kg >1000 mg/kg
Skin corrosion/irritation	Could skin irritation	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Causes eye irritation	
Corneal opacity value	Not available.	
Iris lesion value	Not available.	
Conjunctival reddening value	Not available.	

#### Respiratory or skin sensitization

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Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	Non-hazardous by WHMIS/OSHA criteria.
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity	None
Reproductive toxicity	Non-hazardous by WHMIS/OSHA criteria.
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not available.
Chronic effects	Prolonged inhalation may be harmful.
Further information	Not available.
Name of Toxicologically	Not available.
Synergistic Products	

## 12. Ecological Information

## Ecotoxicity

Components	Species	Test Results
Sodium dodecylbenzene sulfonate	Fish (Rainbow trout) LC50 (96 hours)	1.67 mg/l
	Algae EC50 (96 hours)	29 mg/l
	Daphnia EC50 (48 hours)	2.4 mg/L

Persistence and degradability Bioaccumulative potential	Biodegradable at 100 %. No data available
Mobility in soil	No data available
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal Consideration

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

	14. Transport Information
General	Canada: TDG Proof of Classification: In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product correct as of the SDS date of issue. If applicable, the technical name and the classification of the product will appear below.
U.S. Department of Transport	ation (DOT)
Basic shipping requiremen UN number	
Proper shipping name Hazard class Packing group	Not regulated
Transportation of Dangerous Basic shipping requiremen	
UN number	
Proper shipping name Hazard class Packing group	Not regulated
racking group	
	15. Regulatory Information
Canadian federal regulations	
	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products
Canadian federal regulations	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.
Canadian federal regulations WHMIS status WHMIS classification	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Controlled

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH

FLAMMABILITY

PHYSICAL HAZARD

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Moderate2Slight1Minimal0	PERSONAL PROTECTION B
Disclaimer	The data contained in this material safety data sheet was obtained from sources that were technically accurate, reliable, and state of the art when this document was prepared. If data was unavailable to complete certain sections, the absence of that data is identified in this document. Because the supplier cannot know the exact circumstances during actual use of this product, other hazards, exposure scenarios, disposal considerations, and regulations may apply and it is the responsibility of the user to read and understand the product label and this document before use. Do not use the product for purposes other than those stated in Section 1.
Issue date	April 24, 2017
Effective date	April 24, 2017
	Version 1.0
Further information	For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.
Prepared by	Unica Canada inc. Phone Number : (450) 655-8168
Other information	This Safety Data Sheet was prepared to comply with the current OSHA Hazard Communication Standard (HCS) adoption of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

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