

SDS DATE: May 29, 2023

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: NADP-NADPH Assay
PRODUCT CODES: Cat# MA-0126
RESTRICTIONS ON USE: For laboratory research purposes only. Not for drug or household use.
MANUFACTURER: AkrivisBio, Inc.
ADDRESS: 48511 Warm Springs Blvd., Suite 213, Fremont, CA 94539
EMERGENCY PHONE: 408-739-9315
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SECTION 2: HAZARDS IDENTIFICATION

Component	Description	Volume	Safety Information
Extraction Buffer	Liquid	50 ml	No hazards
Cycling Buffer	Liquid (contains isopropanol)	15 ml	See below
Alcohol Dehydrogenase	Liquid (contains Glycerol)	0.2 ml	See below
WST Tetrazolium salt	Lyophilized (contains WST-8)	1 vial	See below
Stop Solution	Liquid (contains SDS)	1.2 ml	See below
NADPH Standard	Liquid	166.7 µg	No hazards

SDS:

Emergency Overview

OSHA Hazards: Flammable solid, Target organ effect, Harmful by ingestion, Irritant, Toxic by skin absorption

Target Organs: Lungs

GHS Classification: Flammable solids (Category 1)
Acute toxicity, Oral (Category 3)
Acute toxicity, Dermal (Category 3)
Skin irritation (Category 2)
Eye irritation (Category 2A)
Specific target organ toxicity – single exposure (Category 3)
Acute aquatic toxicity (Category 2)

GHS Label elements, including precautionary statements

Pictogram:



Signal word: Danger

Hazard statement(s): H315 Causes skin irritation.
H319 Causes serious eye irritation.
H412: Harmful to aquatic life with long-lasting effects.

Precautionary statement(s): P210 Keep away from heat/sparks/open flames/hot surfaces – no smoking.
P261 Avoid breathing dust/fumes/gas/mist/vapors/spray.
P264 Wash hands thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Call a POISON CENTER or doctor/physician.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/container to an approved waste disposal plant.

HMIS Classification

Health hazard: 2
Chronic health hazard: *
Flammability: 3
Physical hazards: 3

NFPA Rating

Health Hazard: 2
Fire: 3
Reactivity Hazard: 3

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
Skin: Toxic if absorbed through skin. Causes skin irritation.
Eyes: Causes eye irritation.
Ingestion: Harmful if swallowed.

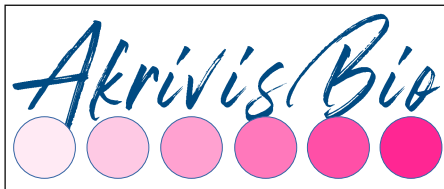
Isopropanol:

Emergency Overview

OSHA Hazards: Flammable liquid, Target organ effect, Irritant

Target Organs: Nerves, Kidney, Cardiovascularsystem, Gastrointestinal tract, Liver

GHS Classification: Flammable liquids (Category 2)
Skin irritation (Category 3)
Eye irritation (Category 2A)
Specific target organ toxicity – single exposure (Category 3)



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GHS Label elements, including precautionary statements

Pictogram:



Signal word:

Danger

Hazard statement(s):

H225 Highly flammable liquid and vapour.
H316 Causes mild skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statement(s):

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing dust/fumes/gas/mist/vapors/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

HMIS Classification

Health hazard: 2
Chronic hazard: *
Flammability: 3
Physical hazards: 0

NFPA Rating

Health Hazard: 2
Fire: 3
Reactivity Hazard: 0

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness or dizziness.
Skin: May be harmful if absorbed through skin. Causes skin burns.
Eyes: Causes severe eye burns.
Ingestion: May be harmful if swallowed.

Glycerol:

Emergency Overview

OSHA Hazards: Target Organ Effect

Target Organs: Kidney

GHS Classification:

Skin irritation (Category 3)
Eye irritation (Category 2B)

GHS Label elements, including precautionary statements

Pictogram:

none

Signal word:

none

Hazard statement(s):

none

Precautionary statement(s):

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

HMIS Classification

Health hazard: 1
Chronic Health Hazard: *
Flammability: 1
Physical hazards: 0

NFPA Rating

Health hazard: 1
Fire: 1
Reactivity Hazard: 0

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed.

WST-8:

Emergency Overview:

GHS Classification: H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

GHS Label elements, including precautionary statements

Pictogram:



Signal word:

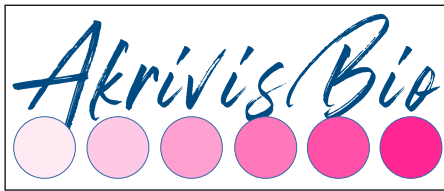
Danger

Hazard statement(s):

H314 Causes severe skin burns and eye damage

Precautionary statement(s):

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face protection
If swallowed: Rinse mouth. Do NOT induce vomiting.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lens] if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
Wash contaminated clothing before reuse.



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P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/ international regulations.

HMIS Classification

Health hazard: *3

Flammability: 0

Physical hazards:

NFPA Rating

Health Hazard: 3

Fire: 0

Reactivity Hazard: 0

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	EC-No.	Molecular Weight	Chemical Formula	Concentration
SDS	151-21-3	205-788-1	288.38	CH ₃ (CH ₂) ₁₁ OSO ₃ Na	<12%
Isopropanol	67-63-0	200-661-7	60.10	C ₃ H ₈ O	<3%
Glycerol	56-81-5	200-289-5	92.09	HOCH ₂ CH(OH)CH ₂ OH	<50%
WST-8	193149-74-5	693-016-8	600.5	C ₂₀ H ₁₃ N ₆ O ₁₁ S ₂ • Na	<100%

SECTION 4: FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

Isopropanol:

Conditions of flammability: Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products: Hazardous decomposition products formed under fire conditions – see section 10.

Further information: Use water spray to cool unopened containers.

Glycerol:

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture Carbon oxides

Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

Further information No data available

Sodium dodecyl sulfate (SDS):

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture: Carbon oxides, Sulphur oxides, Sodium oxides

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further information: Use water spray to cool unopened containers.

WST-8:

Suitable extinguishing media: Use fire fighting measures that suit the environment. A solid water stream may be inefficient.

Special protective equipment for fire fighters: Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products: No further relevant information available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

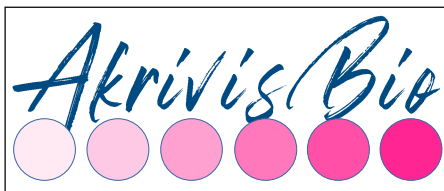
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20 °C.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION



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Isopropanol:

Components	CAS-No.	Value	Control parameters	Basis
2-propanol	67-63-0	TWA	200 ppm	USA. ACGIH Threshold Limit Values (TLV)
Remarks:	Eye & upper respiratory tract irritation. Central nervous system impairment. Not classifiable as a human carcinogen.			
		STEL	400 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Eye & upper respiratory tract irritation. Central nervous system impairment. Not classifiable as a human carcinogen.			
		TWA	400 ppm 980 mg/m ³	USA. Occupational Exposure Limits (OSHA): Table Z-1 Limits for Air Contaminants - 1910.1000
		STEL	500 ppm 1,225 mg/m ³	USA. Occupational Exposure Limits (OSHA): Table Z-1 Limits for Air Contaminants - 1910.1000
		TWA	400 ppm 980 mg/m ³	USA. Occupational Exposure Limits (OSHA): Table Z-1 Limits for Air Contaminants
The value in mg/ m ³ is approximate.				
		TWA	400 ppm 980 mg/m ³	USA. NIOSH Recommended Exposure Limits
		ST	500 ppm 1,225 mg/m ³	USA. NIOSH Recommended Exposure Limits

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product.

Glycerol:

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

No special environmental precautions required.

Sodium dodecyl sulfate (SDS):

Control parameters:

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls

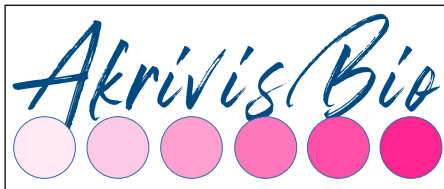
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection



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Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

WST-8:

Control parameters

Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

Exposure controls

Personal protective equipment

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Control of environmental exposure

Do not let product enter drains. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes. Avoid contact with the eyes and skin

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

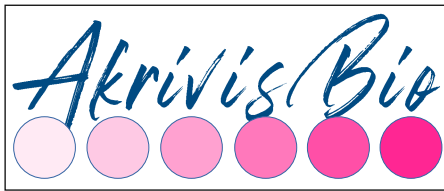
Property	SDS	Isopropanol	Glycerol	WST-8
Appearance:	White solid	Liquid	Clear liquid	Crystalline solid
pH:	7.2	No data available	5.5-8	No data available
Water Solubility:	Soluble	Completely soluble	Soluble	No data available
Other Solubility:	No data available	No data available	No data available	PBS, DMSO
Boiling Point (°C):	No data available	82 °C (180 °F)	182 °C (360 °F)	No data available
Melting Point (°C):	204-207 °C (399-405 °F)	-89.5 °C (-129.1 °F)	20 °C (68 °F)	No data available
Flash Point (°C):	180 °C (356 °F)	12 °C (53.6 °F)	160 °C (320 °F)	No data available
Ignition Temperature (°C):	No data available	425 °C (797 °F)	370 °C (698 °F)	No data available
Density:	0.370 g/cm ³	0.785 g/cm ³	1.25 g/ml	No data available
				No data available

SECTION 10: STABILITY AND REACTIVITY

Property	SDS	Isopropanol	Glycerol	WST-8
Chemical stability:	Stable under recommended storage conditions			
Conditions to avoid:	Heat, flames and sparks. Extremes of temperature and direct sunlight.	Heat, flames, sparks, extremes of temperature and direct sunlight	No data available	No data available
Materials to avoid:	Oxidizing agents	Oxidizing agents, acid anhydrides, aluminum, halogenated compounds, acids	Strong bases, strong oxidising agents	Strong oxidizing agents
Hazardous decomposition products:	Carbon oxides, sulfur oxides, sodium oxides	Carbon oxides	Carbon oxides	carbon oxides, hydrogen sulfide, nitrogen oxides

SECTION 11: TOXICOLOGICAL INFORMATION

SDS:



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Acute toxicity: LD50 Oral – rat – 1,288 mg/kg
LC50 Inhalation – rat – 1 h – >3,900 mg/m³

LC50 Dermal – rabbit – 580 mg/kg

Skin corrosion/irritation: Skin – rabbit – skin irritation – 24 h

Serious eye damage/eye irritation: Eyes – rabbit – risk of serious damage to eyes. OECD Test Guideline 405.

Respiratory or skin sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity: no data available

Carcinogenicity:

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity – single exposure (GHS): Inhalation – may cause respiratory irritation.

Specific target organ toxicity – repeated exposure (GHS): no data available

Aspiration hazard: no data available

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: Toxic if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: Harmful if swallowed.

Synergistic effects: no data available

Additional information: RTECS: WT1050000

Isopropanol:

Acute toxicity: LD50 Oral – rat – 5,045 mg/kg → Remarks: Behavioral: altered sleep time (including change in righting reflex). Behavioral: somnolence (general depressed activity).

LC50 Inhalation – rat – 8 h – 16,000 ppm

LD50 Dermal – rabbit – 12,800 mg/kg

Skin corrosion/irritation: Skin – rabbit- mild skin irritation.

Serious eye damage/eye irritation: Eyes – rabbit – eye irritation – 24 h.

Respiratory or skin sensitization: May cause sensitization by skin contact.

Germ cell mutagenicity: no data available

Carcinogenicity: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP or EPA classification.

IARC: 3 – Group 3: Not classifiable as to its carcinogenicity to humans (2-propanol).

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity – single exposure (GHS): May cause drowsiness or dizziness.

Specific target organ toxicity – repeated exposure (GHS): no data available

Aspiration hazard: no data available

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness or dizziness.

Skin: May be harmful if absorbed through skin. Causes skin burns.

Eyes: Causes severe eye burns.

Ingestion: May be harmful if swallowed.

Signs and Symptoms of Exposure: Central nervous system depression. Prolonged or repeated exposure can cause: nausea, headache, vomiting, narcosis, drowsiness. Overexposure may cause mild, reversible liver effects.

Additional information: RTECS: NT8050000

Glycerol:

Acute toxicity: LD50 Dermal – rabbit – >10,000 mg/kg

Irritation and corrosion: no data available

Sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

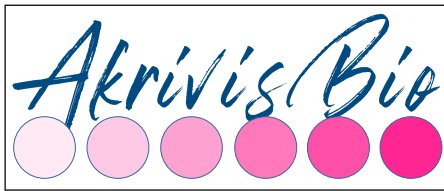
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available



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Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: May be harmful if swallowed.

Synergistic effects: no data available

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional information: RTECS: MA8050000

WST-8:

Acute toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: No data available

Teratogenicity: No data available

Specific target organ toxicity – single exposure (GHS): No data available

Specific target organ toxicity – repeated exposure (GHS): No data available

Aspiration hazard: No data available

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: No data available

Additional information: RTECS: Not available

SECTION 12: ECOLOGICAL INFORMATION

SDS:

Persistence and degradability: Biodegradability: Result → 90% readily biodegradable

Toxicity: Toxicity to fish: mortality NOEC – Oncorhynchus mykiss (rainbow trout) – 19.5 mg/l – 96 h

Mortality LOEC – Pimephales promelas (fathead minnow) – 4.6 mg/l – 8 d

LC50 – Oncorhynchus mykiss (rainbow trout) – 3.6 mg/l – 96 h

Toxicity to algae: Growth inhibition LOEC – Pseudokirchneriella subcapitata – 2.68 mg/l – 6 d

Bioaccumulative potential: Bioaccumulation: Cyprinus carpio (Carp) – 72 h

Bioconcentration factor (BCF): 3.9-5.3

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic life.

Isopropanol:

Persistence and degradability: no data available

Toxicity: Toxicity to fish: LC50 – Pimephales promelas (fathead minnow) – 9,640 mg/l – 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 – Daphnia magna (water flea) – 5,102 mg/l – 24 h

Immobilization EC50 – Daphnia magna (water flea) – 6,851 mg/l – 24 h

Toxicity to algae: EC50 – Desmodesmus subspicatus (green algae) – >2,000 mg/l – 72 h

EC50 – algae – >1,000 mg/l – 24 h

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

Glycerol:

Persistence and degradability: no data available

Toxicity: no data available

Bioaccumulative potential: no data available

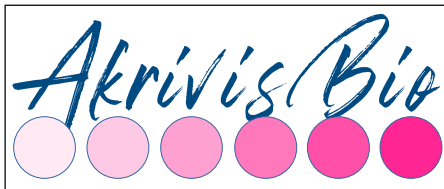
Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

WST-8:

Persistence and degradability: No data available



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Toxicity: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: No data available

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or unneutralized.

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

SDS:

DOT (US): UN-number: 2926, Class: 4.1 (6.1), Packing group: II; Proper shipping name: Flammable solids, toxic, organic, n.o.s. (Sodium dodecyl sulfate); Marine pollutant: No; Poison Inhalation Hazard: No

IMDG: UN-number: 2926, Class: 4.1 (6.1), Packing group: II; EMS-No: F-A, S-G; Proper shipping name: FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (Sodium dodecyl sulfate); Marine pollutant: No

IATA: UN-number: 2926, Class: 4.1 (6.1), Packing group: II; Proper shipping name: Flammable solids, toxic, organic, n.o.s. (Sodium dodecyl sulfate)

Isopropanol:

DOT (US): UN-Number: 1219, Class: 3, Packing group: II; Proper shipping name: Isopropanol; Marine pollutant: No; Poison Inhalation Hazard: No

IMDG: UN-Number: 1219, Class: 3, Packing group: II; EMS-No: F-E, S-D; Proper shipping name: ISOPROPANOL; Marine pollutant: No

IATA: UN-Number: 1219, Class: 3, Packing group: II; Proper shipping name: Isopropanol

Glycerol:

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods

WST-8:

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

SECTION 15: REGULATORY INFORMATION

SARA 302 Components: SARA 302: No chemical in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: The following components are subject to reporting levels established by SARA Title III, Section 313:

2-propanol, CAS-No. 67-63-0; Revision Date: 1987-01-01;

SARA 311/312 Hazards:

SDS: Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Isopropanol: Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Glycerol: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components: 2-propanol, CAS-No. 67-63-0; Glycerol, CAS-No. 56-81-5; Revision Date: 2007-03-01

Pennsylvania Right To Know Components:

Sodium dodecyl sulfate, CAS-No. 151-21-3

2-propanol, CAS-No. 67-63-0

Glycerol, CAS-No. 56-81-5; Revision Date: 2007-03-01

New Jersey Right To Know Components:

Sodium dodecyl sulfate, CAS-No. 151-21-3

2-propanol, CAS-No. 67-63-0

Glycerol, CAS-No. 56-81-5; Revision Date: 2007-03-01

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

EU regulations:

Component	Risk Phrases	Safety Phrases
SDS	R10, R25, R36/38, R45	S23, S24/25, S26, S45
Isopropanol	R11, R36, R67	S7, S16, S24/25, S26
Glycerol	--	S24/25
WST-8	--	--

SECTION 16: OTHER INFORMATION

DISCLAIMER:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. AkrivisBio, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.