

Material Safety Data Sheet

SmartClear Clearing Buffer

Section 1. Identification of the chemical product and of the company

1.1 Product identifier

- Trade name: SmartClear Buffer set (TypeA, TypeB) 2nd Gen.

Catalogue Number: SC-B2001

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

No further relevant information available.

Application of the substance / the mixture : Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

LifeCanvas Technologies.

302-301, Jamwon-ro 88, Seocho-gu, Seoul Korea

Technical services, customer support: support@lifecanvastech.com

1.4 Emergency telephone number: +82-10-2498-7980 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.

Section2. Hazard(s) identification

· Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

- Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void



- · Hazard statements Void
- · Additional information: Contact with acids may cause release of toxic gases
- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

Section3. Composition/information on ingredients

Chemical characterization: Mixtures

- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components:

151-21-3 Sodium Dodecyl Sulfate 10-20%

Section4. First-aid measures

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

Section5. Fire-fighting measures

Extinguishing media

· Suitable extinguishing agents

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective clothing.

· Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Reference to other sections

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No dangerous substances are released.

Section 7. Handling and storages

Handling

- · Precautions for safe handling Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and receptacles: Room temperature, Keep container tightly closed.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.

Specific end use(s) No further relevant information available

Section8. Exposure controls/Personal protection

Additional information about design of technical systems: No further data; see item 7.

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Not required.
- · Protection of hands: Protective gloves
- · Material of gloves Synthetic gloves
- · Penetration time of glove material

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

· Eye protection: Safety glasses

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

- · General Information
- Appearance:
 Form: Liquid
 Color: Light yellow
 Odor: Odorless
- · Odour threshold: Not determined.
- pH-value at 20 °C: 9.5



· Change in condition

Melting point/Melting range: undetermined Boiling point/Boiling range: undetermined

· Flash point: Not applicable

· Flammability (solid, gaseous) Not applicable.

· Ignition temperature:

Decomposition temperature: Not determined. • **Auto igniting:** Product is not self-igniting.

· Danger of explosion: Product does not present an explosion hazard.

Explosion limits:
 Lower: Not determined.
 Upper: Not determined.
 Water: Fully miscible

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

dynamic: Not determined. kinematic: Not determined.

· Solvent content: Organic solvents: 0.0 %

· Other information No further relevant information available.

Section 10. Stability and reactivity

Reactivity

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

Section 11. Toxicological information

Routes of entry: Absorbed through skin. Eye contact.

Toxicity to animals: Acute oral toxicity (LD50): 6440 mg/kg (Rat) (Calculated value for the mixture).

Chronic effects on humans: MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. [Sodium dodecyl sulfate]. Contains material, which may cause damage to the following organs: skin.

Other toxic effects on humans: Slightly hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation.

Special remarks on toxicity to animals: Lowest published lethal dose: LDL [Rabbit] - Route: Skin; Dose: 10000 mg/kg (Sodium dodecyl sulfate)

Special Remarks on chronic effects on humans: May cause adverse reproductive effects based on animal test data. No human data found. (Sodium dodecyl sulfate)

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Special Remarks on other toxic effects on humans: Acute potential health effects: skin irritation. May cause allergic reaction. It may be absorbed through the skin. Eyes: Causes eye irritation. Inhalation: Breathing mist or vapor may cause respiratory tract and mucous membrane irritation. May cause allergic respiratory reaction. Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea, and bloating. May also affect behavior (ataxia, somnolence), and cardiovascular system. Chronic potential health effects: Skin: Repeated or prolonged skin contact may cause allergic dermatitis. Inhalation: Repeated or prolonged inhalation may cause allergic respiratory reaction. Ingestion: Repeated or prolonged ingestion may also affect the liver.

Section 12. Ecological information

Toxicity

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (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.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

Section 13. Disposal considerations

Waste treatment methods

· Recommendation

Hand over to hazardous waste disposers.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

Section 14. Transport information

- · UN-Number
- · DOT, ADR, ADN, IMDG, IATA Void
- · UN proper shipping name
- · DOT, ADR, ADN, IMDG, IATA Void
- · Transport hazard class(es)
- · DOT, ADR, ADN, IMDG, IATA
- · Class Void
- · Packing group

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- · DOT, ADR, IMDG, IATA Void
- · Environmental hazards:
- · Marine pollutant: No
- · Special precautions for user Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78

and the IBC Code Not applicable.

- · Transport/Additional information: Not dangerous according to the above specifications.
- · UN "Model Regulation": -

Section 15. Regulatory information

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

- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- · Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Carcinogenic categories
- EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- National regulations
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

Section 16. Other information.

References: Not available.

Other Special Considerations: Not available.

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