


## Safety Data Sheet (SDS)

1. Product and Company Information			
Product Name: GenBody COVID-19 Ag Product Number: COVAG025 series (COVAG025-N, COVAG025-NU) Identified Uses: In vitro Diagnostics Company: GenBody Inc. Address: GenBody Inc.3-18, Eopseong 2-gil, Seobuk-gu, Cheonan-si, Chungcheongnam-do 31077, Republic of Korea Tel: +82-41-523-8993 Fax: +82-41-523-8991			
2. Hazards Identification.			
The product is classified and labeled in accordance with Directive 1272/2008/EC.			
a. GHS Classification Acute toxic (oral) Category 4 Acute toxic (dermal) Category 4			
b. GHS Labeling			
Pictogram			
Signal word	Warning		
Hazard statement(s)			
H302+H312	Harmful if swallowed or in contact with skin		
Precautionary statement(s)			
Prevention			
P262	Do not get in eyes, on skin, or on clothing.		
P264	Wash the contact area thoroughly after handling.		
P280	Wear protective gloves / eye protection/ face protection.		
P270	Do not eat, drink or smoke when using this product.		
Response			
P301+P312	IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.		
P302+P352	IF ON SKIN: wash with plenty of water.		
P312	Call a POISON CENTER of doctor/physician if you feel unwell.		
P330	Rinse mouth.		
P363	Wash contaminated clothing before reuse.		
Storage			
P405	Store locked up.		
Disposal			
P501	Dispose of contents and container under related law and regulations.		
c. Other hazards which do not result in classification: N/A			
3. Composition/Information on Ingredient			
Hazardous/Non-hazardous Components			
Chemical Name	CAS No./ EEC No.	Classification	Weight %
Sodium carbonate	497-19-8/ 207-838-8	Eye Irrit. 2; H319	≤ 0.16 %
Sodium bicarbonate	144-55-8/ 205-633-8	-	≤ 0.3 %
alpha-(4-(1,1,3,3-Tetramethylbutyl)phenyl)-omegahydroxypoly(oxy-1,2-ethanediyl)  (Also known as; Octoxinol)	9002-93-1/686-527-2	Acute Tox. 4; 2; 1; Aquatic Acute 1; Aquatic Chronic 1; H302, H315, H318, H400, H410 M-Factor - Aquatic Acute: 10 - Aquatic Chronic: 1	≤ 1.0 %
Ethylene di-amine tetra-acetic acid disodium salt(EDTA-2Na)	6381-92-6/613-386-6	Acute Tox. 4; STOT RE 2; Aquatic Chronic 3; H332, H373, H412	≤ 0.75 %
Sodium azide	26628-22-8/ 247-852-1	Acute Tox. 2; H300 Acute Tox. 1; H310 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	≤ 0.09 %

<b>4. First Aid Measures.</b>
<p><b>a. In case of eye contact</b>          Rinse thoroughly with plenty of water for at least 15 minutes.          After eye contact: rinse out with plenty of water. Remove contact lenses.          Seek medical attention if irritation occurs.          Consult a physician.</p>
<p><b>b. In case of skin contact</b>          Wash off with soap and plenty of water.          In case of skin contact: Remove contaminated clothing and launder before reuse.          Consult a physician.</p>
<p><b>c. If inhaled</b>          If breathed in, move person into fresh air. If not breathing, give artificial respiration. Seek medical advice if discomfort occurs.          After inhalation: move person into fresh air. If not breathing: give artificial respiration.          Consult a physician</p>
<p><b>d. If swallowed</b>          If swallowed: give water to drink (two glasses at most). Seek medical advice immediately.          In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.</p>
<p><b>e. Most important acute symptoms/effects</b>          No data available          Most important delayed symptoms/effects          No data available</p>
<p><b>f. Notes to physician</b>          No data available</p>
<p><b>General advice</b>          Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.          Show this material safety data sheet to the doctor in attendance.</p>
<b>5. Fire Fighting Measures</b>
<p><b>a. Suitable extinguishing media</b>          Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.</p>
<p><b>Extinguishing media which shall not be used for safety reasons</b>          For this substance/mixture no limitations of extinguishing agents are given.</p>
<p><b>b. Specific hazards arising from the chemical</b>          May emit toxic fumes under fire conditions.          Not considered as a product presenting risk of explosion.</p>
<p><b>c. Special protective actions for fire-fighters</b>          Wear self-contained breathing apparatus for firefighting if necessary.          Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.</p>
<p><b>Further information</b>          Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.</p>
<b>6. Accidental Release Measures</b>
<p><b>a. Personal precautions, protective equipment and emergency procedures</b>          All equipment used when handling the product must be ground.          Wear proper protective equipment and avoid contact with skin or inhalation of dust.          Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment.          Avoid Breathing dust, vapors, mist or gas          Avoid contact with skin and clothing.</p>
<p><b>b. Environmental precautions</b>          Do not let product enter drains.          Prevent further leakage or spillage if safe to do so.</p>
<p><b>c. Methods and materials for containment and cleaning up</b>          Pick up and collect product in suitable container for disposal.          Soak up with inert absorbent material and dispose of as hazardous waste.          Remove residu with high-efficient cleaner.          Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.</p>

Keep in suitable, closed containers for disposal.
<b>d. Reference to other sections</b>
For disposal see section 13.
<b>7. Handling / Storage</b>
<b>a. Precautions for safe handling</b>
For precautions see section 2.
<b>b. Conditions for safe storage, including any incompatibilities</b>
Do not touch the test window. Do not open until use. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep tightly closed. Storage temperature: 2 to 30°C
<b>8. Exposure Controls / Personal Protection</b>
<b>a. Control parameters</b>
OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.
OSHA permissible exposure limit (PEL) - [Sodium carbonate] : Not applicable - [Sodium Bicarbonate] : Not applicable - [Octoxinol] : Not applicable - [EDTA disodium salt] : Not applicable - [Sodium azide] : 0.1 ppm Ceiling (as HN <sub>3</sub> ); 0.3 mg/m <sup>3</sup> Ceiling (as NaN <sub>3</sub> ) - [Water] : Not applicable
Occupational exposure limits (ACGIH) - [Sodium carbonate] : Not applicable - [Sodium Bicarbonate] : Not applicable - [Octoxinol] : Not applicable - [EDTA disodium salt] : Not applicable - [Sodium azide] : STEL - C 0.29 mg/m <sup>3</sup> - [Water] : Not applicable
<b>b. Appropriate engineering controls</b>
Ensure adequate ventilation, especially in confined area. Ensure compliance with applicable exposure limits and operate local exhaust ventilation when working. General industrial hygiene practice. Change contaminated clothing. Wash hands after working with substance.
<b>c. Personal protective equipment (Individual protection measures)</b>
<b>Respiratory protection</b>
If the respirator is the sole means of protection, use a full-face supplied air respirator. Wear suitable respiratory equipment in case of inadequate ventilation.
<b>Hand protection</b>
Handle with gloves. Gloves must be inspected prior to use.
<b>Eye and face protection</b>
Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards.
<b>Skin protection</b>
Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.
<b>Hygiene measures</b>
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Change contaminated clothing. Preventive skin protection recommended. Immediately change contaminated clothing. Apply preventive skin protection.

**9. Physical / Chemical Properties**

<b>Physical state</b>	: Liquid.
<b>Color</b>	: Colorless.
<b>Odor</b>	: Not available.
<b>Odor Threshold</b>	: Not available.
<b>Taste</b>	: Not available.
<b>Molecular Weight</b>	: Not applicable.
<b>Molecular Formula</b>	: Not applicable.
<b>pH</b>	:: Not applicable.
<b>Boiling Point</b>	: The lowest known values is 100°C (212°F)(water)
<b>Melting Point</b>	: May start to solidify at 0°C (32°F) based on data for: water.
<b>Critical Temperature</b>	: The lowest known value is 374.3°C(705.7°F)(water).
<b>Vapor Pressure</b>	: The highest known value is 3.2 kPa (23.8 mmHg) (at 20°C)
<b>Volatility</b>	: 0%(w/w). (water). Weighted average: 0%(w/w).
<b>VOC</b>	: -90°C(%).
<b>Evaporation rate</b>	: 0.36 (water) compared to (n-butyl acetate= 1).
<b>Specific Gravity</b>	: Not available.
<b>Solubility</b>	: Easily soluble in cold water, hot water, methanol, acetone.
<b>Ionicity (in Water)</b>	: Amphoteric. (water).
<b>Dispersion Properties</b>	: See solubility in water, methanol, acetone.
<b>Physical Chemical Comments</b>	: Not available.

**10. Stability / Reactivity**

<b>Reactivity</b>	: The product is stable.
<b>Chemical stability</b>	: Stable under recommended storage and handling
<b>Possibility of hazardous reactions</b>	: Not considered as a product presenting risks of explosion.
<b>Conditions to avoid</b>	: Not available
<b>Incompatible materials</b>	: Not available

**11. Toxicological Information**
**11.1 Information on toxicological effects (Potential Health effects)**

Harmful if swallowed or in contact with skin.

**11.2 Acute toxicity**

- Oral : [Product] ATEmix> 5,000 mg/kg (Not classified)
  - [Sodium carbonate]: LD50= 2,800 mg/kg (Rat)(Ref:ECHA, Reliability 1)
  - [Sodium Bicarbonate]: LD50> 4,000 mg/kg (Rat)(Ref:ECHA, Reliability 1)
  - [Octoxinol]: LD50= 1,800 mg/kg (Rat)(Ref:ChemIDplus)
  - [EDTA disodium salt]: LD50= 2,300 mg/kg (Rabbit)(Ref:HSDB)
  - [Sodium azide]: LD50= 27 mg/kg (Rat)(Ref:ChemIDplus)
  - [Water]: LD50> 90,000 mg/kg (Rat)(Ref:ChemIDplus)
- Dermal : [Product] There are substances classified as Cat.1 in the composition, but they are below the limit concentration standard and do not apply to the classification.
  - [Sodium carbonate]: LD50> 2,000 mg/kg (Rabbit)(Ref:ECHA, Reliability 1)
  - [Sodium Bicarbonate]: Not available
  - [Octoxinol]: Not available
  - [EDTA disodium salt]: Not available
  - [Sodium azide]: LD50= 20 mg/kg (Rabbit)(Ref:ChemIDplus)
  - [Water]: Not available
- Inhalation(dust/mist) : [Product] There are substances classified as Cat.2 in the composition, but they are below the limit concentration standard and do not apply to the classification.
  - [Sodium carbonate]: Not available
  - [Sodium Bicarbonate]: Not available
  - [Octoxinol]: Not available

- [EDTA disodium salt]: Not available
- [Sodium azide]: LD50= 0.054 ~ 0.52 mg/L (Rat, 4h, GLP)(Ref:ECHA, Reliability 1)
- [Water]: Not available

### 11.3 Skin corrosion/irritation

- [Sodium carbonate]: Not irritating (Rabbit, OECD TG 404, GLP)(Ref:ECHA, Reliability 1)
- [Sodium Bicarbonate]: Slightly irritating (Rabbit, GLP)(Ref:ECHA, Reliability 1)
- [Octoxinol]: Not available
- [EDTA disodium salt]: None of the 26 volunteers treated with Disodium EDTA had Irritation.(Human)(Ref:HSDB)
- [Sodium azide]: Sodium azide is non irritant to skin.(Human, GLP)(Ref:ECHA, Reliability 1)
- [Water]: Not available

### 11.4 Serious eye damage/irritation

- [Sodium carbonate]: Irritating (While the eye appeared normal on day 2 and 14, respectively) (Rabbit)(Ref:ECHA, Reliability 1)
- [Sodium Bicarbonate]: Not classified for eye irritation or corrosion.(Rabbit, OECD TG 405, GLP)(Ref:ECHA, Reliability 1)
- [Octoxinol]: Not available
- [EDTA disodium salt]: Not available
- [Sodium azide]: Sodium azide is not considered to be an eye irritant.(Cattle, OECD TG 437, GLP)(Ref:ECHA, Reliability 1)
- [Water]: Not available

### 11.5 Respiratory or skin sensitization

Respiratory sensitization:

- [Sodium carbonate]: Not available
- [Sodium Bicarbonate]: Not available
- [Octoxinol]: Not available
- [EDTA disodium salt]: Not available
- [Sodium azide]: Not available
- [Water]: Not available

Skin sensitization:

- [Sodium carbonate]: No indication of any potential to sensitize the skin could be found.(Ref:GESTIS)
- [Sodium Bicarbonate]: Not available
- [Octoxinol]: Not available
- [EDTA disodium salt]: Five male guinea pigs were injected intracutaneously with a volume of 0.1 mL, then 9 volumes of 0.2 mL Disodium EDTA on alternate days. A challenge injection (0.1 mL) was given 2 weeks after the last induction injection, and the treatment sites were evaluated 24 hours later. The guinea pigs had no signs of allergic reactions.(Guinea pig)(Ref:HSDB)
- [Sodium azide]: Sodium azide was not a skin sensitizer in the LLNA assay.(Mouse, OECD TG 429, GLP)(Ref:ECHA, Reliability 1)
- [Water]: Not available

### 11.6 Germ cell mutagenicity

- [Sodium carbonate]:
  - In vitro –Negative (Escherichia coli)(Ref:OECD SIDS)
  - In vitro –Negative (S.typhimurium, Bacterial reverse mutation assay, Metabolic activation:with)(Ref:ECHA, Reliability 2)
- [Sodium Bicarbonate]:
  - In vitro – Negative (Bacterial reverse mutation assay, OECD TG 471)(Ref:ECHA, Reliability 2)
  - In vitro – Negative (Mammalian chromosome aberration test, OECD TG 473) (Ref:ECHA, Reliability 2)
  - In vitro – Negative (DNA-repair test in E. coli, Metabolic activation: with and without) (Ref:ECHA, Reliability 2)
- [Octoxinol]: Not available
- [EDTA disodium salt]:
  - In vitro – Numerous tests carried out with EDTA and its alkali salts provided no valid indication of any genotoxic effect. Damage to chromosomes (aneugenic effect) was found in isolated tests at very high doses and was attributed to a chelating effect.(Ref:GESTIS)
- [Sodium azide]:
  - In vitro – Negative (Chinese hamster ovary, Mammalian chromosome aberration test, Metabolic activation: with and without, OECD TG 473, Read across) (Ref:ECHA, Reliability 2)
- [Water]: Not available

### 11.7 Carcinogenicity

- [Sodium carbonate]: Not carcinogenicity
- [Sodium Bicarbonate]: Not carcinogenicity
- [Octoxinol]: Not carcinogenicity

- [EDTA disodium salt]: Not carcinogenicity
- [Sodium azide]: ACGIH - A4
- [Water]: Not carcinogenicity

**11.8 Reproductive toxicity**

- [Sodium carbonate]: Developmental effects observed: not specified (Rat) (Ref:ECHA, Reliability 2)
- [Sodium Bicarbonate]: No effects observed at the highest dose tested.(Rat) (Ref:ECHA, Reliability 2)
- [Octoxinol]: Not available
- [EDTA disodium salt]: EDTA and its alkali salts including Na<sub>2</sub>EDTA did not show any effects in tests on the developmental toxicity when they were administered in doses up to 1,000 mg/kg bw. At 1,250 mg/kg bw x d there were embryotoxic and also teratogenic effects which were attributed to a depletion of zinc levels in fetes. No influence on fertility could be found in a multi-generation study with doses up to 250 mg CaNa<sub>2</sub>EDTA /kg bw. Indications of a reduction in fertility were seen at very high doses of Na<sub>2</sub>EDTA (3,000 mg/kg bw) (Ref:GESTIS)
- [Sodium azide]: Developmental toxicity decreased fetal body weight. Reduction of dose to 10 mg/kg/day at days 10-12. Overt maternal and developmental toxicity was observed at a dosage level of 17.5/10 mg/kg/day, which can be considered as LOAEL. No adverse effects were observed in the lower dose groups.(Rat, OECD TG 414) (Ref:ECHA, Reliability 2)
- [Water]: Not available

**11.9 STOT-single exposure**

- [Sodium carbonate]: Ataxia, muscle tremors, red nasal discharge, urinary staining of the abdomen, soft stool, piloerection, prostration, lethargy, faecal staining of the abdomen and dyspnoea. All animals surviving the study were clear of signs of effect by day 5.(Rat)(Ref:ECHA, Reliability 1)
- [Sodium Bicarbonate]: All the surviving animals gained weight during the postexposure observation period. The clinical signs of toxicity included soft stool, hypoactivity, dark-stained urogenital area. The surviving animals returned to a normal appearance by day 2. Of the females dosed with 3500mg/kg, 4/5 had soft stool, 1/5 had a dark-stained urogenital area and 1/5 exhibited hypoactivity, within the first day.(Rat, GLP)(Ref:ECHA, Reliability 1)
- [Octoxinol]: Not available
- [EDTA disodium salt]: Signs of toxicity included ataxia, convulsions, and diarrhea. Changes in tissues were not reported during this study.(Rat)(Ref:HSDB)
- [Sodium azide]: At 0.52 mg/L exposure level, the surviving animals were hypoactive and exhibited hunched posture, abnormal respiration and nasal discharge - At 0.0542 mg/L exposure level, all animals exhibited ocular and nasal discharge.(Rat)(Ref:ECHA, Reliability 1)
- [Water]: Not available

**11.10 STOT-repeated exposure**

- [Sodium carbonate]: There has been no significant reports of ill health caused by inhalation of sodium carbonate either in powder or aerosol form.(Human)(Ref:ECHA, Reliability 2)
- [Sodium Bicarbonate]: Sodium hydrogen carbonate was found to be not carcinogenic when administered to Fisher 344 rats via the diet in a concentration of 0.64% for a period of 104 weeks.(Rat, Read across) (Ref:ECHA, Reliability 2)
- [Octoxinol]: Not available
- [EDTA disodium salt]: The results can be applied to all EDTA alkali salts because the degree of dissociation and the capability to form complexes are only determined by the physiological pH and are independent of which alkali salt it is. The lowest NOAEL found in a 2-year study on rats and mice which received the trisodium salt of EDTA orally was approx. 500 mg/kg bw x d. In subchronic studies with Na<sub>2</sub>EDTA on rats, doses from approx. 1000 mg/kg bw x d upwards caused diarrhea, loss of weight and influenced clinical-chemical parameters.(Rat, Mouse)(Ref:GESITS)
- [Sodium azide]: Clinical findings (labored breathing and hunched position) and histopathologic lesions (brain necrosis and pulmonary congestion and hemorrhage) were seen in the rats administered 20 mg/kg Sodium azide. Deaths in the 20 mg/kg dose groups were attributed to brain necrosis. No histopathologic lesions were observed in the lower dose groups.(Rat, OECD TG 408, GLP)(Ref:ECHA, Reliability 2)
- [Water]: Not available

**11.11 Aspiration hazard**

- [Sodium carbonate]: Not available
- [Sodium Bicarbonate]: Not available
- [Octoxinol]: Not available
- [EDTA disodium salt]: Not available
- [Sodium azide]: Not available
- [Water]: Not available



**12. Ecological Information**

(a) Ecotoxicity (aquatic and terrestrial, where available):

- Short-term (acute) aquatic hazard: [Product] Not classified
- Long-term (chronic) aquatic hazard: [Product] Not classified
- 1) Fish :
  - [Sodium carbonate]: LC50 = 300 mg/L (*Lepomis macrochirus*, 96hr) (Ref:ECHA, Reliability 2)
  - [Sodium Bicarbonate]: LC50 = 7,100 mg/L (*Lepomis macrochirus*, 96hr, GLP) (Ref:ECHA, Reliability 1)
  - [Octoxinol]: Not available
  - [EDTA disodium salt]: LC50 = 4,530,000 mg/L (*Fish*, Calculated) (Ref:CCR)
  - [Sodium azide]: LC50 = 0.8 mg/L (*Oncorhynchus mykiss*, 96hr) (Ref:ECHA, Reliability 2)
  - [Water]: LC50 = 16,062.827 mg/L (96hr) (*Fish*, Calculated)(Ref:EPI SUITE)
- 2) Invertebrates :
  - [Sodium carbonate]: EC50= 220 ~ 227 mg/L (*Ceriodaphnia sp.*, 48hr) (Ref:ECHA, Reliability 2)
  - [Sodium Bicarbonate]: EC50= 4,100 mg/L (*Daphnia magna.*, 48hr, GLP) (Ref:ECHA, Reliability 1)
  - [Octoxinol]: Not available
  - [EDTA disodium salt]: Not available
  - [Sodium azide]: EC50= 5 mg/L (*Gammarus fasciatus.*, 48hr) (Ref:ECHA, Reliability 2)
  - [Water]: LC50 = 6,675.5 mg/L (*Green algae*, 48hr)(Calculated) (Ref:EPI SUITE)
- 3) Aquatic plants :
  - [Sodium carbonate]: EC50= 10 ~ 100 mg/L (*Algae*, various) (Ref:ECHA, Reliability 2)
  - [Sodium Bicarbonate]: Not available
  - [Octoxinol]: Not available
  - [EDTA disodium salt]: Not available
  - [Sodium azide]: EC50= 0.35 mg/L (*Pseudokirchneriella subcapitata.*, OECD TG 201, 96hr) (Ref:ECHA, Reliability 2)
  - [Water]: EC50= 1,368.296 mg/L (*Green algae*, 96hr)(Calculated) (Ref:EPI SUITE)

(b) Persistence and degradability:

- 1) Persistence
  - [Sodium carbonate]: logKow= -6.19 (Calculated) (Ref:EPI Suite)
  - [Sodium Bicarbonate]: logPow= -4.01 (Estimated) (Ref:ChemIDplus)
  - [Octoxinol]: logKow= 2.7 (Calculated) (Ref:GESTIS)
  - [EDTA disodium salt]: logKow= -10.17 (Calculated) (Ref:EPI Suite)
  - [Sodium azide]: logKow= 0.16 (Calculated) (Ref:EPI Suite)
  - [Water]: logKow= -1.38 (Calculated) (Ref:EPI Suite)
- 2) Degradability
  - [Sodium carbonate]: Not available
  - [Sodium Bicarbonate]: Not available
  - [Octoxinol]: Not available
  - [EDTA disodium salt]: Not available
  - [Sodium azide]: Not available
  - [Water]: Not available

(c) Bioaccumulative potential:

- 1) Bioaccumulative potential
  - [Sodium carbonate]: BCF= 3.162 (Calculated) (Ref:EPI Suite)
  - [Sodium Bicarbonate]: BCF= 3.162 (Calculated) (Ref:EPI Suite)
  - [Octoxinol]: BCF= 416.9 (Calculated) (Ref:EPI Suite)
  - [EDTA disodium salt]: BCF= 3.162 (Calculated) (Ref:EPI Suite)
  - [Sodium azide]: BCF= 2.719 (Calculated) (Ref:EPI Suite)
  - [Water]: BCF= 0.8942 (Calculated) (Ref:EPI Suite)
- 2) Biodegradation
  - [Sodium carbonate]: Ready Biodegradability Prediction: Yes (Calculated) (Ref:EPI Suite)
  - [Sodium Bicarbonate]: Ready Biodegradability Prediction: Yes (Calculated) (Ref:EPI Suite)
  - [Octoxinol]: Ready Biodegradability Prediction: No (Calculated) (Ref:EPI Suite)
  - [EDTA disodium salt]: Ready Biodegradability Prediction: Yes (Calculated) (Ref:EPI Suite)
  - [Sodium azide]: It is not rapidly degradable (Degradation rate by direct measurement (HPLC): 1% ) (Ref:NITE)
  - [Water]: Ready Biodegradability Prediction: Yes (Calculated) (Ref:EPI Suite)

(d) Mobility in soil:

- [Sodium carbonate]: Koc= 1 (Calculated) (Ref:EPI Suite)
- [Sodium Bicarbonate]: Koc= 1 (Calculated) (Ref:EPI Suite)
- [Octoxinol]: Koc= 795.2 (OECD TG 106, GLP) (Ref:ECHA, Reliability 1)
- [EDTA disodium salt]: Koc= 312.7 (Calculated) (Ref:EPI Suite)

- [Sodium azide]: Koc= 535 (Calculated) (Ref:EPI Suite)
- [Water]: Koc= 13.22 (Calculated) (Ref:EPI Suite)

- (e) Other adverse effects (such as hazardous to the ozone layer): Ozone layer hazard
- [Sodium carbonate]: Not applicable
  - [Sodium Bicarbonate]: Not applicable
  - [Octoxinol]: Not applicable
  - [EDTA disodium salt]: Not applicable
  - [Sodium azide]: Not applicable
  - [Water]: Not applicable

### 13. Disposal Considerations

(a) Disposal methods

- This product is not listed under United States Environmental Protection Agency (US EPA) hazardous waste regulations, 40 CFR 261.33 paragraphs (a) or (f), i.e. chemical products that are considered hazardous if they become wastes. It does not exhibit any of the hazardous characteristics listed in 40 CFR 261 Subpart C.
- Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

(b) Precautions (including disposal of contaminated container of package)

- Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### 14. Transport Information

- (a) UN number: Not applicable
- (b) UN proper shipping name: Not applicable
- (c) Transport hazard class(es): Not applicable
- (d) Packing group, if applicable: Not applicable
- (e) Environmental hazards (e.g., Marine pollutant (Yes/No)): No
- (f) Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable
- (g) Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

### 15. Regulatory Information

Safety, health and environmental regulations specific for the product in question

[Sodium carbonate]

- U.S.A. management information(OSHA regulation): Not applicable
- U.S.A. management information(CERCLA regulation): Not applicable
- U.S.A. management information(EPCRA 302 regulation): Not applicable
- U.S.A. management information(EPCRA 304 regulation): Not applicable
- U.S.A. management information(EPCRA 313 regulation): Not applicable
- U.S.A. management information(Rotterdam Convention on Substances): Not applicable
- U.S.A. management information(Stockholm Convention on Substances): Not applicable
- U.S.A. management information(Mont- real Protocol on Substances): Not applicable

[Sodium Bicarbonate]

- U.S.A. management information(OSHA regulation): Not applicable
- U.S.A. management information(CERCLA regulation): Not applicable
- U.S.A. management information(EPCRA 302 regulation): Not applicable
- U.S.A. management information(EPCRA 304 regulation): Not applicable
- U.S.A. management information(EPCRA 313 regulation): Not applicable
- U.S.A. management information(Rotterdam Convention on Substances): Not applicable
- U.S.A. management information(Stockholm Convention on Substances): Not applicable
- U.S.A. management information(Mont- real Protocol on Substances): Not applicable

[Octoxinol]

- U.S.A. management information(OSHA regulation): Not applicable
- U.S.A. management information(CERCLA regulation): Not applicable
- U.S.A. management information(EPCRA 302 regulation): Not applicable
- U.S.A. management information(EPCRA 304 regulation): Not applicable
- U.S.A. management information(EPCRA 313 regulation): Not applicable
- U.S.A. management information(Rotterdam Convention on Substances): Not applicable
- U.S.A. management information(Stockholm Convention on Substances): Not applicable
- U.S.A. management information(Mont- real Protocol on Substances): Not applicable

[EDTA disodium salt]

- U.S.A. management information(OSHA regulation): Not applicable
- U.S.A. management information(CERCLA regulation): Not applicable
- U.S.A. management information(EPCRA 302 regulation): Not applicable
- U.S.A. management information(EPCRA 304 regulation): Not applicable



- U.S.A. management information(EPCRA 313 regulation): Not applicable
- U.S.A. management information(Rotterdam Convention on Substances): Not applicable
- U.S.A. management information(Stockholm Convention on Substances): Not applicable
- U.S.A. management information(Mont- real Protocol on Substances): Not applicable  
[Sodium azide]
- U.S.A. management information(OSHA regulation): Not applicable
- U.S.A. management information(CERCLA regulation): 1000 lb ; 454 kg
- U.S.A. management information(EPCRA 302 regulation): 500 lb
- U.S.A. management information(EPCRA 304 regulation): 1000 lb
- U.S.A. management information(EPCRA 313 regulation): Applicable
- U.S.A. management information(Rotterdam Convention on Substances): Not applicable
- U.S.A. management information(Stockholm Convention on Substances): Not applicable
- U.S.A. management information(Mont- real Protocol on Substances): Not applicable  
[Water]
- U.S.A. management information(OSHA regulation): Not applicable
- U.S.A. management information(CERCLA regulation): Not applicable
- U.S.A. management information(EPCRA 302 regulation): Not applicable
- U.S.A. management information(EPCRA 304 regulation): Not applicable
- U.S.A. management information(EPCRA 313 regulation): Not applicable
- U.S.A. management information(Rotterdam Convention on Substances): Not applicable
- U.S.A. management information(Stockholm Convention on Substances): Not applicable
- U.S.A. management information(Mont- real Protocol on Substances): Not applicable

#### 16. Other Information

(a) Abbreviations and acronyms

- ECHA : European Chemicals Agency
- EU CLP : EU Regulation 1272/2008 on the classification, labelling and packaging of chemicals and mixtures)
- GLP : Good Laboratory Practice
- NFPA : National Fire Protection Association
- EL50 : 50% Effect Loading dose
- LC50 : Lethal Concentration 50% kill
- LD50: Lethal Dose 50% kill
- LL50 : Lethal loading rate 50% kill
- TWA : Time weight Average

(b) Key literature references and sources for data

- |                                 |                                                       |
|---------------------------------|-------------------------------------------------------|
| ○ ACGIH                         | ○ IARC                                                |
| ○ CAMEO Chemicals NOAA          | ○ ICSC                                                |
| ○ ChemIDplus                    | ○ INCHEM                                              |
| ○ ECHA                          | ○ IPCS                                                |
| ○ ECOSAR                        | ○ NITE                                                |
| ○ Emergency response guide book | ○ OECD SIDS                                           |
| ○ EPI Suite                     | ○ PubChem                                             |
| ○ HSDB                          | ○ Recommendations on the transport of dangerous goods |
| ○ HPVIS                         |                                                       |

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