

**D-A - FLOWCID A REAGENT AQUEOUS DILUTION - A COMPONENT FOR GENERATION OF PURE AND STABLE CHLORINE DIOXIDE**

Printing: 04/09/2020

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2 (Replaced 1)

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier:** D-A - FLOWCID A REAGENT AQUEOUS DILUTION - A COMPONENT FOR GENERATION OF PURE AND STABLE CHLORINE DIOXIDE

UFI: 6D40-Q0H3-K00Y-JJY3

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

Relevant uses: Multiuse cleaner. For professional user/industrial user only.

Exclusive professional or industrial use.

The chlorine dioxide generated with the 2 components is a biocidal product and its generation must be registered under the relevant regulations. Generators are provided, so the customer is responsible for the product.

Uses advised against: All uses not specified in this section or in section 7.3

**1.3 Details of the supplier of the safety data sheet:**

BALBOA CHEMICAL, S.L.

C/ Dinamismo, 3 - P.I. Los Olivos

28906 Getafe - Madrid - España

Phone.: +34918082529

info@flowquimica.es

<https://www.flowquimica.es>**1.4 Emergency telephone number:** The information on the updated composition of the product has been sent to the Toxicological Information Service of Spain (National Institute of Toxicology and Forensic Scientists). In case of poisoning call the Toxicology Information Service 24 h: +34 91 562 04 20. Factory: +34 91 808 25 29 (8-14h).**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture:****CLP Regulation (EC) No 1272/2008:**

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Eye Irrit. 2: Eye irritation, Category 2, H319

Skin Irrit. 2: Skin irritation, Category 2, H315

**2.2 Label elements:****CLP Regulation (EC) No 1272/2008:****Warning****Hazard statements:**

Eye Irrit. 2: H319 - Causes serious eye irritation

Skin Irrit. 2: H315 - Causes skin irritation

**Precautionary statements:**

P264: Wash thoroughly after handling

P280: Wear protective gloves/protective clothing/eye protection/face protection

P302+P352: IF ON SKIN: Wash with plenty of 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

P332+P313: If skin irritation occurs: Get medical advice/attention

P337+P313: If eye irritation persists: Get medical advice/attention

**2.3 Other hazards:**

Product fails to meet PBT/vPvB criteria

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substance:**

- CONTINUED ON NEXT PAGE -

**D-A - FLOWCID A REAGENT AQUEOUS DILUTION - A COMPONENT FOR GENERATION OF PURE AND STABLE CHLORINE DIOXIDE**

Printing: 04/09/2020

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2 (Replaced 1)

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)**

Non-applicable

**3.2 Mixture:****Chemical description:** Chlorine compound/s**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 7758-19-2 EC: 231-836-6 Index: Non-applicable REACH: 01-2119529240-51-XXXX	<b>Sodium chlorite<sup>(1)</sup></b>  Regulation 1272/2008  Acute Tox. 2: H310; Acute Tox. 3: H301; Aquatic Acute 1: H400; Aquatic Chronic 3: H412; Ox. Sol. 1: H271; Skin Corr. 1B: H314; STOT RE 2: H373; EUH032, EUH071 - Danger	Self-classified  <b>0,5 - &lt;1,7 %</b>

<sup>(1)</sup> Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

**SECTION 4: FIRST AID MEASURES****4.1 Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

**By eye contact:**

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

**4.2 Most important symptoms and effects, both acute and delayed:**

Acute and delayed effects are indicated in sections 2 and 11.

**4.3 Indication of any immediate medical attention and special treatment needed:**

RECOMMENDATIONS IN CASES OF INTOXICATION OR ACCIDENT: Symptoms can appear from the first minutes to 24 -48 hours after ingestion or inhalation, so vigilance is advised. The clinical manifestations that can occur in case of exposure and / or contact are: irritation to corrosion in eyes, skin and mucous membranes. Nausea, vomiting, diarrhea, and severe abdominal pain. Pharyngo-laryngeal irritation, dry cough, tachypnea, wheezing, sensation of dyspnea and chest burning. Pulmonary edema, bronchospasm. Basic action measures: Remove the person from the place of exposure and remove stained or splashed clothing. In contact with the eyes, wash with plenty of water for at least 15 minutes. Remember to remove contact lenses. In contact with the skin, wash with plenty of soap and water, without rubbing. In case of ingestion, DO NOT induce vomiting and do not administer anything by mouth, immediately call a poison information center. Keep the patient at rest and maintain body temperature. If possible administer oxygen immediately. If the person is unconscious, lay them on their side with their head lower than the rest of the body and their knees semi-bent. If necessary, take the intoxicated person to a health center, and whenever possible carry the label or container. DO NOT LEAVE THE INTOXICATED PERSON ALONE IN ANY CASE. Therapeutic advice for doctors and healthcare personnel: Symptomatic patients: 100% humid oxygen, associated with bronchodilators in the same mask or parenterally. Asymptomatic patients: maintain good hydration and humidity, as well as rest. In case of ingestion, value endoscopy. Symptomatic and supportive treatment.

- CONTINUED ON NEXT PAGE -

Printing: 04/09/2020  
(Replaced 1)

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2

Page 2/11

**D-A - FLOWCID A REAGENT AQUEOUS DILUTION - A COMPONENT FOR GENERATION OF PURE AND STABLE CHLORINE DIOXIDE**

Printing: 04/09/2020

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2 (Replaced 1)

**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media:**

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use full jet water as an extinguishing agent.

**5.2 Special hazards arising from the substance or mixture:**

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures:**

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilled product (See section 8). Evacuate the area and keep out those who do not have protection.

**6.2 Environmental precautions:**

Avoid spillage into the aquatic environment as it contains substances potentially dangerous for this. Contain the product absorbed in hermetically sealed containers. In the case of serious spillage into the aquatic environment notify the relevant authority.

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling:****A.- Precautions for safe manipulation**

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

**B.- Technical recommendations for the prevention of fires and explosions**

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

**C.- Technical recommendations to prevent ergonomic and toxicological risks**

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

**D.- Technical recommendations to prevent environmental risks**

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

**7.2 Conditions for safe storage, including any incompatibilities:****A.- Technical measures for storage**

- CONTINUED ON NEXT PAGE -



## Safety data sheet

According to 1907/2006/EC (REACH), 2015/830/EU (THIS SDS IS JUST FOR INFORMATIVE PURPOSE. THE SDS SHALL BE SUPPLIED IN AN OFFICIAL LANGUAGE OF THE COUNTRY WHERE THE PRODUCT IS PLACED ON THE MARKET)



### D-A - FLOWCID A REAGENT AQUEOUS DILUTION - A COMPONENT FOR GENERATION OF PURE AND STABLE CHLORINE DIOXIDE

Printing: 04/09/2020

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2 (Replaced 1)

#### SECTION 7: HANDLING AND STORAGE (continued)

Minimum Temp.: 5 °C  
 Maximum Temp.: 30 °C  
 Maximum time: 24 Months

**B.- General conditions for storage**

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

**7.3 Specific end use(s):**

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the workplace

There are no occupational exposure limits for the substances contained in the product

**DNEL (Workers):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Sodium chlorite CAS: 7758-19-2 EC: 231-836-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	0,58 mg/kg	Non-applicable	0,58 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,41 mg/m <sup>3</sup>	Non-applicable

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Sodium chlorite CAS: 7758-19-2 EC: 231-836-6	Oral	0,029 mg/kg	Non-applicable	0,029 mg/kg	Non-applicable
	Dermal	0,29 mg/kg	Non-applicable	0,29 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,1 mg/m <sup>3</sup>	Non-applicable

**PNEC:**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Sodium chlorite CAS: 7758-19-2 EC: 231-836-6	STP	1 mg/L	Fresh water	0,00065 mg/L	
	Soil	Non-applicable	Marine water	0,00065 mg/L	
	Intermittent	0,006 mg/L	Sediment (Fresh water)	Non-applicable	
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable	



**8.2 Exposure controls:**

**A.- General security and hygiene measures in the work place**

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

**B.- Respiratory protection**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Compulsory use of face mask	Filter mask for particles (FFP3)	 CAT III	EN 149:2001+A1:2009	Replace when an increase in resistance to breathing is observed.

**C.- Specific protection for the hands**

- CONTINUED ON NEXT PAGE -

Printing: 04/09/2020  
(Replaced 1)

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2

Page 4/11





## Safety data sheet

According to 1907/2006/EC (REACH), 2015/830/EU (THIS SDS IS JUST FOR INFORMATIVE PURPOSE. THE SDS SHALL BE SUPPLIED IN AN OFFICIAL LANGUAGE OF THE COUNTRY WHERE THE PRODUCT IS PLACED ON THE MARKET)



### D-A - FLOWCID A REAGENT AQUEOUS DILUTION - A COMPONENT FOR GENERATION OF PURE AND STABLE CHLORINE DIOXIDE



Printing: 04/09/2020

Date of compilation: 07/05/2019

Revised: 07/05/2019



Version: 2 (Replaced 1)

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2003+A1:2009 and EN ISO 374-1:2016

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"



#### D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2001 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

#### E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing			Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes		EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

#### F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

#### Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

#### Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	0 % weight
V.O.C. density at 20 °C:	0 kg/m <sup>3</sup> (0 g/L)
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

##### 9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

##### Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Crystalline

\*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

Printing: 04/09/2020  
(Replaced 1)

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2

Page 5/11



## Safety data sheet

According to 1907/2006/EC (REACH), 2015/830/EU (THIS SDS IS JUST FOR INFORMATIVE PURPOSE. THE SDS SHALL BE SUPPLIED IN AN OFFICIAL LANGUAGE OF THE COUNTRY WHERE THE PRODUCT IS PLACED ON THE MARKET)



### D-A - FLOWCID A REAGENT AQUEOUS DILUTION - A COMPONENT FOR GENERATION OF PURE AND STABLE CHLORINE DIOXIDE

Printing: 04/09/2020

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2 (Replaced 1)

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Non-applicable *
<b>Volatility:</b>	
Boiling point at atmospheric pressure:	100 °C
Vapour pressure at 20 °C:	2350 Pa
Vapour pressure at 50 °C:	12381,01 Pa (12,38 kPa)
Evaporation rate at 20 °C:	Non-applicable *
<b>Product description:</b>	
Density at 20 °C:	1042,5 kg/m <sup>3</sup>
Relative density at 20 °C:	1,043
Dynamic viscosity at 20 °C:	1,07 cP
Kinematic viscosity at 20 °C:	1,03 cSt
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	2,3 - 2,5
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
<b>Flammability:</b>	
Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	Non-applicable *
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
<b>Explosive:</b>	
Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *

#### 9.2 Other information:

Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

#### SECTION 10: STABILITY AND REACTIVITY

##### 10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

##### 10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

- CONTINUED ON NEXT PAGE -

Printing: 04/09/2020  
(Replaced 1)

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2

Page 6/11

**D-A - FLOWCID A REAGENT AQUEOUS DILUTION - A COMPONENT FOR GENERATION OF PURE AND STABLE CHLORINE DIOXIDE**

Printing: 04/09/2020

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2 (Replaced 1)

**SECTION 10: STABILITY AND REACTIVITY (continued)****10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

**10.5 Incompatible materials:**

Acids	Water	Oxidising materials	Combustible materials	Others
Precaution	Not applicable	Avoid direct impact	Precaution	Avoid alkalis or strong bases

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects:**

The experimental information related to the toxicological properties of the product itself is not available

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

## A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

## B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

## C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces eye damage after contact.

## D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.  
IARC: Sodium chlorite (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

## E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

## F- Specific target organ toxicity (STOT) - single exposure:

- CONTINUED ON NEXT PAGE -

**D-A - FLOWCID A REAGENT AQUEOUS DILUTION - A COMPONENT FOR GENERATION OF PURE AND STABLE CHLORINE DIOXIDE**

Printing: 04/09/2020

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2 (Replaced 1)

**SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**G- Specific target organ toxicity (STOT)-repeated exposure:**

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**H- Aspiration hazard:**

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
Sodium chlorite CAS: 7758-19-2 EC: 231-836-6	284 mg/kg	140 mg/kg	Rat
	LC50 inhalation	>5 mg/L (4 h)	Rabbit

**Acute Toxicity Estimate (ATE mix):**

ATE mix		Ingredient(s) of unknown toxicity
Oral	16392,5 mg/kg (Calculation method)	0 %
Dermal	8080,81 mg/kg (Calculation method)	0 %
Inhalation	>20 mg/L (4 h) (Calculation method)	Non-applicable

**SECTION 12: ECOLOGICAL INFORMATION**

The experimental information related to the eco-toxicological properties of the product itself is not available

**12.1 Toxicity:**

Identification	Acute toxicity		Species	Genus
	LC50	EC50		
Sodium chlorite CAS: 7758-19-2 EC: 231-836-6	105 mg/L (96 h)	Non-applicable	Cyprionodon variegatus	Fish
	EC50	Non-applicable		

**12.2 Persistence and degradability:**

Not available

**12.3 Bioaccumulative potential:**

Not available

**12.4 Mobility in soil:**

Not available

**12.5 Results of PBT and vPvB assessment:**

Product fails to meet PBT/vPvB criteria

**12.6 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods:**

Code	Description	Waste class (Regulation (EU) No 1357/2014)

- CONTINUED ON NEXT PAGE -

Printing: 04/09/2020  
(Replaced 1)

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2

Page 8/11



**D-A - FLOWCID A REAGENT AQUEOUS DILUTION - A COMPONENT FOR GENERATION OF PURE AND STABLE CHLORINE DIOXIDE**

Printing: 04/09/2020

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2 (Replaced 1)

**SECTION 13: DISPOSAL CONSIDERATIONS (continued)**

20 01 29\* | detergents containing hazardous substances

Dangerous

**Type of waste (Regulation (EU) No 1357/2014):**

HP6 Acute Toxicity

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

**SECTION 14: TRANSPORT INFORMATION****Transport of dangerous goods by land:**

With regard to ADR 2019 and RID 2019:

<b>14.1 UN number:</b>	Non-applicable
<b>14.2 UN proper shipping name:</b>	Non-applicable
<b>14.3 Transport hazard class(es):</b>	Non-applicable
Labels:	Non-applicable
<b>14.4 Packing group:</b>	Non-applicable
<b>14.5 Environmental hazards:</b>	No
<b>14.6 Special precautions for user</b>	
Special regulations:	Non-applicable
Tunnel restriction code:	Non-applicable
Physico-Chemical properties:	see section 9
Limited quantities:	Non-applicable
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b>	Non-applicable

**Transport of dangerous goods by sea:**

With regard to IMDG 39-18:

<b>14.1 UN number:</b>	Non-applicable
<b>14.2 UN proper shipping name:</b>	Non-applicable
<b>14.3 Transport hazard class(es):</b>	Non-applicable
Labels:	Non-applicable
<b>14.4 Packing group:</b>	Non-applicable
<b>14.5 Environmental hazards:</b>	No
<b>14.6 Special precautions for user</b>	
Special regulations:	Non-applicable
EmS Codes:	
Physico-Chemical properties:	see section 9
Limited quantities:	Non-applicable
Segregation group:	Non-applicable
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b>	Non-applicable

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2020:

- CONTINUED ON NEXT PAGE -

Printing: 04/09/2020  
(Replaced 1)

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2

Page 9/11



## Safety data sheet

According to 1907/2006/EC (REACH), 2015/830/EU (THIS SDS IS JUST FOR INFORMATIVE PURPOSE. THE SDS SHALL BE SUPPLIED IN AN OFFICIAL LANGUAGE OF THE COUNTRY WHERE THE PRODUCT IS PLACED ON THE MARKET)



### D-A - FLOWCID A REAGENT AQUEOUS DILUTION - A COMPONENT FOR GENERATION OF PURE AND STABLE CHLORINE DIOXIDE

Printing: 04/09/2020

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2 (Replaced 1)

#### SECTION 14: TRANSPORT INFORMATION (continued)

<b>14.1 UN number:</b>	Non-applicable
<b>14.2 UN proper shipping name:</b>	Non-applicable
<b>14.3 Transport hazard class(es):</b>	Non-applicable
Labels:	Non-applicable
<b>14.4 Packing group:</b>	Non-applicable
<b>14.5 Environmental hazards:</b>	No
<b>14.6 Special precautions for user</b>	
Physico-Chemical properties:	see section 9
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b>	Non-applicable

#### SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

##### Relevant instructions for use:

Before using, read the safety data sheet to avoid personal risks and the environment, consult the mixing protocol. Generation: shake REAGENT A with a mask and fill with ACTIVATOR B in a ventilated place. Close container and shake mixture. Replace the label on the REAGENT A container with the stable solution label and write the production date. Wait at least 7 hours. Precautions: max 45 days from production date, recommended use for kinetically stable concentration. Maximum 3 months storage activated in closed container from mixing. Do not use crystallized, for correct reaction: raise temperature and stir periodically until complete dilution. Generated product contains gas dissolved in water, direct exposure can be irritating, neutralizable with sodium thiosulfate. Do not expose to light. Do not mix with acids, bases, oxidizing agents or sources of heat. In case of poisoning or accident, call the National Toxicology Institute +34 915 620 420.

##### Cleanright (www.cleanright.eu) © A.I.S.E.:



Keep away from eyes. If product gets into eyes rinse thoroughly with water.



Rinse hands after use.



People with sensitive or damaged skin should avoid prolonged contact with the product.

##### Seveso III:

Non-applicable

##### Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

Non-applicable

##### Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

##### Other legislation:

The product could be affected by sectorial legislation

- CONTINUED ON NEXT PAGE -

Printing: 04/09/2020  
(Replaced 1)

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2

Page 10/11

**D-A - FLOWCID A REAGENT AQUEOUS DILUTION - A COMPONENT FOR GENERATION OF PURE AND STABLE CHLORINE DIOXIDE**

Printing: 04/09/2020

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2 (Replaced 1)

**SECTION 15: REGULATORY INFORMATION (continued)**

- Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products
- Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents
- Commission Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII
- Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation)

**15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

**SECTION 16: OTHER INFORMATION****Legislation related to safety data sheets:**

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

**Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:**

Non-applicable

**Texts of the legislative phrases mentioned in section 2:**

H315: Causes skin irritation

H319: Causes serious eye irritation

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

Acute Tox. 2: H310 - Fatal in contact with skin

Acute Tox. 3: H301 - Toxic if swallowed

Aquatic Acute 1: H400 - Very toxic to aquatic life

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects

Ox. Sol. 1: H271 - May cause fire or explosion, strong oxidiser

Skin Corr. 1B: H314 - Causes severe skin burns and eye damage

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral)

**Classification procedure:**

Skin Irrit. 2: Calculation method

Eye Irrit. 2: Calculation method

**Advice related to training:**

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5-day biochemical oxygen demand

BCF: Bioconcentration factor

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

EC50: Effective concentration 50

Log-POW: Octanol-water partition coefficient

Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -

Printing: 04/09/2020  
(Replaced 1)

Date of compilation: 07/05/2019

Revised: 07/05/2019

Version: 2

Page 11/11