

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

SECTION 1: Identification

1.1 Product identifier

Trade name	COLORCLEAR* Solution
CAS number	Mixture
Alternative name(s)	Sodium Borohydride Solution
Product number	109428

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

Relevant identified uses	Industrial use Professional use
Uses advised against	Do not use for squirting or spraying. Do not use for products which come into direct contact with the skin. Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

1.3 Details of the supplier of the safety data sheet

Ascensus Specialties LLC
4800 State Route 12
Elma WA 98541
United States

Telephone: +1-360-482-4350
e-mail: Ask@ascensuspecialties.com
Website: www.ascensuspecialties.com

e-mail (competent person) sds@ascensuspecialties.com

1.4 Emergency telephone number

Emergency information service	Chemtrec (USA): +1-800-424-9300 (collect calls accepted), Chemtrec (International): +1-703-741-5970 (collect calls accepted)
-------------------------------	--

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section	Hazard class	Category	Hazard class and category	Hazard statement
A.10	acute toxicity (oral)	4	Acute Tox. 4	H302
A.2	skin corrosion/irritation	1	Skin Corr. 1	H314
A.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
A.7	reproductive toxicity	1B	Repr. 1B	H360
B.16	substance or mixture corrosive to metals	1	Met. Corr. 1	H290

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word danger

- Pictograms

GHS05, GHS07,
GHS08



- Hazard statements

- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H360 May damage fertility or the unborn child.

- Precautionary statements

- P202 Do not handle until all safety precautions have been read and understood.
- P234 Keep only in original container.
- P260 Do not breathe dusts or mists.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear eye protection/face protection.
- P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a poison center/doctor.
- P321 Specific treatment (see on this label).
- P363 Wash contaminated clothing before reuse.
- P390 Absorb spillage to prevent material damage.
- P405 Store locked up.
- P406 Store in corrosive resistant container with a resistant inner liner.
- P501 Dispose of contents/container to industrial combustion plant.

- Hazardous ingredients for labelling Sodium Borohydride, Sodium Hydroxide

2.3 Other hazards

Hazards not otherwise classified

- Reacts violently with water.
- Harmful to aquatic life (GHS category 3: aquatic toxicity - acute).

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

Identifiers

CAS No Mixture

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Water	CAS No 7732-18-5	47.2 – 58.5		
Sodium Hydroxide	CAS No 1310-73-2	30 – 40.4	Acute Tox. 4 / H312 Skin Corr. 1A / H314 Eye Dam. 1 / H318 Met. Corr. 1 / H290	
Sodium Borohydride	CAS No 16940-66-2	11.5 – 12.4	Acute Tox. 3 / H301 Skin Corr. 1C / H314 Eye Dam. 1 / H318 Repr. 1B / H360 Water-react. 1 / H260	

For full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 Description of first- aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

Self-protection of the first aider

Provision of sufficient ventilation.

4.2 Most important symptoms and effects, both acute and delayed

Corrosive to skin. Corrosive to the respiratory tract.

4.3 Indication of any immediate medical attention and special treatment needed

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart.

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

SECTION 5: Fire-fighting measures**5.1 Extinguishing media**

Suitable extinguishing media

Excess of water, Foam, Alcohol resistant foam, BC-powder, ABC-powder, Carbon dioxide (CO₂), Sand, Dry sand**5.2 Special hazards arising from the substance or mixture**

Reacts with water, releasing excess pressure or heat. Substance or mixture corrosive to metals. Heat. Acids.

Hazardous combustion products

None

5.3 Advice for firefighters

non-combustible In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Chemical protective clothing, Eye and face protection, Self-contained breathing apparatus (SCBA)

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel

Follow emergency procedures such as the need to evacuate the danger area or to consult an expert. Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Neutralization techniques. Use of adsorbent materials.

Equipment required for containment/clean-up

Non-sparking tools and equipment, Shovel, Collecting container, Protective gloves, Eye protection (e.g. protective goggles), Personal protective equipment: see section 8

Never use:

Solvents

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Recommendations

- Measures to prevent fire as well as aerosol and dust generation
Use local and general ventilation. Use only in well-ventilated areas.
- Handling of incompatible substances or mixtures
Do not mix with acids. Do not mix with other chemicals.
- Keep away from
Acids, Oxidizers, Alcohol
- Measures to protect the environment
Avoid release to the environment. Dispose of this material and its container to hazardous or special waste collection point.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres
Keep cool. Protect from sunlight.
- Corrosive conditions
Store in corrosive resistant container with a resistant inner liner. Protect from moisture.
- Flammability hazards
Take precautionary measures against static discharge. Ground/bond container and receiving equipment.
- Ignition sources that are of particular importance in operational practice
Flames and hot gases, Static electricity
- Incompatible substances or mixtures
Observe compatible storage of chemicals. Keep/store away from clothing/combustible materials.
- Do not mix with
Acids, Oxidizers, Alcohol, Keep away from metal salts

Control of the effects

Protect against external exposure, such as

- Heat
- Packaging compatibilities
Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.
- Shelf-life
Production date + 60 months.
- Recommended storage temperature
25 °C.

7.3 Specific end use(s)

See section 16 for a general overview.

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Notation	Source
US	sodium hydroxide	1310-73-2	TLV®						2		ACGIH® 2019
US	sodium hydroxide	1310-73-2	PEL		2						29 CFR 1910.1000

Notation

Ceiling-C ceiling value is a limit value above which exposure should not occur

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Human health values

Relevant DNELs and other threshold levels

Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	1 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects

Relevant DNELs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Sodium Hydroxide	1310-73-2	DNEL	1 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects

Environment values

Relevant PNECs and other threshold levels

Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
PNEC	1.75 mg/l	aquatic organisms	freshwater	short-term (single instance)
PNEC	1.75 mg/l	aquatic organisms	marine water	short-term (single instance)
PNEC	54.77 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
PNEC	2.55 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
PNEC	0.255 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
PNEC	4.8 mg/kg	terrestrial organisms	soil	short-term (single instance)

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

Relevant PNECs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
Sodium Borohydride	16940-66-2	PNEC	1.75 mg/l	aquatic organisms	freshwater	short-term (single instance)
Sodium Borohydride	16940-66-2	PNEC	1.75 mg/l	aquatic organisms	marine water	short-term (single instance)
Sodium Borohydride	16940-66-2	PNEC	54.77 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Sodium Borohydride	16940-66-2	PNEC	2.55 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Sodium Borohydride	16940-66-2	PNEC	0.255 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Sodium Borohydride	16940-66-2	PNEC	4.8 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Type of material

PVC: polyvinyl chloride, PE: polyethylene, NR: natural rubber, latex, NBR: acrylonitrile-butadiene rubber, IIR: isobutene-isoprene (butyl) rubber, PVA: polyvinyl alcohol, Nitrile, IIR: isobutene-isoprene (butyl) rubber

- Breakthrough times of the glove material

>480 minutes (permeation: level 6)

- Protective gloves - Splash protection

Type of material PVC: polyvinyl chloride
 PE: polyethylene
 NR: natural rubber, latex
 NBR: acrylonitrile-butadiene rubber
 IIR: isobutene-isoprene (butyl) rubber
 PVA: polyvinyl alcohol
 nitrile IIR: isobutene-isoprene (butyl) rubber

- Other protection measures

Wash hands thoroughly after handling. Protective clothing for use against solid particulates. Footwear protecting against chemicals.

Respiratory protection

Type: ABEK-P2 (combined filters against gases, vapors and particles, color code: Brown/Grey/Yellow/Green/White).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	colorless - clear
Odor	odorless

Other safety parameters

pH (value)	14 (alkaline)
Melting point/freezing point	not determined
Initial boiling point and boiling range	130 – 135 °C at 760 mmHg
Flash point	not determined
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	not determined
Vapor pressure	<0 Pa at 25 °C
Density	not determined
Vapor density	this information is not available
Relative density	1.4 at 20 °C (water = 1)

Solubility(ies)

- Water solubility	miscible in any proportion
--------------------	----------------------------

Partition coefficient

- n-octanol/water (log KOW)	this information is not available
-----------------------------	-----------------------------------

Auto-ignition temperature	not determined
---------------------------	----------------

Viscosity

- Dynamic viscosity	60.43 mPa s at 20 °C
---------------------	----------------------

Explosive properties	none
----------------------	------

Oxidizing properties	none
----------------------	------

9.2 Other information

	there is no additional information
--	------------------------------------

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". Substance or mixture corrosive to metals.

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

Reacts with water, releasing excess pressure or heat. Keep away from metal salts.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Water, Acids, Oxidizers, Spent catalysts containing transition metals or transition metal compounds not otherwise specified, Keep away from metal salts

Release of flammable materials with:

Acids

10.6 Hazardous decomposition products

Product may release hydrogen gas. Increased storage temperatures will accelerate this process. Borate.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Harmful if swallowed.

- Acute toxicity estimate (ATE)

Oral 500 mg/kg

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Sodium Hydroxide	1310-73-2	dermal	1,100 mg/kg
Sodium Borohydride	16940-66-2	oral	56.57 mg/kg

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

May damage the unborn child. May damage fertility.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life.

Aquatic toxicity (acute)			
Endpoint	Value	Species	Exposure time
EC50	40.4 mg/l	aquatic invertebrates	48 h
LC50	74 mg/l	fish	96 h

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Sodium Hydroxide	1310-73-2	EC50	40.4 mg/l	aquatic invertebrates	48 h
Sodium Borohydride	16940-66-2	LC50	74 mg/l	fish	96 h

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Endocrine disrupting potential

None of the ingredients are listed.

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of this material and its container to hazardous or special waste collection point. Do not empty into drains; dispose of this material and its container at hazardous or special waste collection point. This article should be disposed of as hazardous waste. Please do not put it in your normal household waste.

Waste treatment-relevant information

Physico-chemical treatment.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets. Before discharge of the waste water into a municipal waste water treatment facility the product normally needs to be neutralized.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number	3320
14.2 UN proper shipping name	Sodium borohydride and sodium hydroxide solutions
14.3 Transport hazard class(es)	
Class	8 (corrosive substances)
14.4 Packing group	II (substance presenting medium danger)
14.5 Environmental hazards	non-environmentally hazardous acc. to the dangerous goods regulations
14.6 Special precautions for user	
There is no additional information.	

14.7 Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT)

Index number	3320
Proper shipping name	Sodium borohydride and sodium hydroxide solutions
- Particulars in the shipper's declaration	UN3320, Sodium borohydride and sodium hydroxide solutions, 8, II
- Reportable quantity (RQ)	2,500 lbs (1,135 kg) (Sodium Hydroxide)
Class	8
Packing group	II
Danger label(s)	8

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05



Special provisions (SP) B2, IB2, N34, T7, TP2
 ERG No 157

International Maritime Dangerous Goods Code (IMDG)

UN number 3320
 Proper shipping name SODIUM BOROHYDRIDE AND SODIUM HYDROXIDE SOLUTIONS
 Class 8
 Marine pollutant -
 Packing group II
 Danger label(s) 8



Special provisions (SP) -
 Excepted quantities (EQ) E2
 Limited quantities (LQ) 1 L
 EmS F-A, S-B
 Stowage category A
 Segregation group 18 - Alkalis

International Civil Aviation Organization (ICAO-IATA/DGR)

UN number 3320
 Proper shipping name Sodium borohydride and sodium hydroxide solutions
 Class 8
 Packing group II
 Danger label(s) 8



Special provisions (SP) A3
 Excepted quantities (EQ) E2
 Limited quantities (LQ) 0,5 L

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

SECTION 15: Regulatory information

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

National regulations (United States)

Toxic Substance Control Act (TSCA)

all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

none of the ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
Sodium Hydroxide	1310-73-2		1	1000 (454)

Legend

1 "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	CAS No	Functionality	Authoritative Lists
Sodium Hydroxide	1310-73-2		OEHHA RELs

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshold	De Minimis Concentration Threshold
Sodium Hydroxide	1310-73-2				1.0 %

- Hazardous Substances List (MN-ERTK)

Name of substance	CAS No	References	Remarks
Sodium Hydroxide	1310-73-2	A, N, O	

Legend

- A American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH
- N National Institute for Occupational Safety and Health (NIOSH), "Recommendations for Occupational Safety and Health Standards," August 1988, available from NIOSH, Publications Dissemination Office, Division of Standards Development and Technology Transfer
- O Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
Sodium Borohydride	16940-66-2		R1
Sodium Hydroxide	1310-73-2		CO R1

Legend

CO Corrosive
R1 Reactive - First Degree

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name acc. to inventory	CAS No	Classification
SODIUM HYDROXIDE (NA(OH))	1310-73-2	E

Legend

E Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance	CAS No	References
Sodium Hydroxide	1310-73-2	T, F

Legend

F Flammability (NFPA®)
T Toxicity (ACGIH®)

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

VOC content

Regulated Volatile Organic Compounds (VOC-EPA): Regulated Volatile Organic Compounds (VOC-Cal ARB):

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
Health	3	major injury likely unless prompt action is taken and medical treatment is given
Flammability	0	material that will not burn under typical fire conditions
Physical hazard	2	materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

Category	Degree of hazard	Description
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	1	material that in themselves is normally stable but that can become unstable at elevated temperatures and pressures
Special hazard	W	material that can form potentially explosive mixtures with water

National inventories

Country	Inventory	Status
CA	DSL	all ingredients are listed
EU	REACH Reg.	all ingredients are listed
US	TSCA	all ingredients are listed

Legend

DSL	Domestic Substances List (DSL)
REACH Reg.	REACH registered substances
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR U.S. Department of Transportation
ACGIH®	American Conference of Governmental Industrial Hygienists
ACGIH® 2019	From ACGIH®, 2019 TLVs® and BEIs® Book. Copyright 2019. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement
Acute Tox.	Acute toxicity
ATE	Acute Toxicity Estimate
Cal ARB	California Air Resources Board
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DEP CODE	Department of Environmental Protection Code
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
DOT	Department of Transportation (USA)

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

Abbr.	Descriptions of used abbreviations
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EmS	Emergency Schedule
EPA	Environmental Protection Agency. An agency of the federal government of the United States charged with protecting human health and the environment
ERG No	Emergency Response Guidebook - Number
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HHS	Higher hazard substance
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LHS	Lower hazard substance
Met. Corr.	Substance or mixture corrosive to metals
NFPA®	National Fire Protection Association (United States)
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
Repr.	Reproductive toxicity
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
TLV®	Threshold Limit Values
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
Water-react.	Material which, in contact with water, emits flammable gases

COLORCLEAR* Solution

Version number: GHS 1.2

Date of compilation: 2020-05-05

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IM-DG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H260	In contact with water releases flammable gases, which may ignite spontaneously.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H360	May damage fertility or the unborn child.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.