Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

Protek HD

Version number: GHS 5.0
Replaces version of: 2020-03-04 (GHS 4)

Revision: 2024-06-21

SECTION 1: Identification

1.1 Product identifier

Trade name **Protek HD**

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

Relevant identified uses
All-purpose cleaner
Concentrate
Professional use
Industrial use
Consumer use (private households)

Uses advised against
Do not use for squirting or spraying. Do not use for products which come into direct contact with the skin.

1.3 Details of the supplier of the safety data sheet

Protek Chemical
487 W. 1st Avenue
P.O. Box 1057
Glenns Ferry ID 83623

1-888-776-8351
protek@protekchemical.com

1.4 Emergency telephone number

Emergency information service
USA 1.800.535.5053, INTL 1.352.323.3500
24 hour emergency number

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 state-ment
A.2	skin corrosion/irritation	1	Skin Corr. 1	H314
A.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
A.9	specific target organ toxicity - repeated exposure	2	STOT RE 2	H373
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. Delayed or immediate effects can be expected after short or long-term exposure.

2.2 Label elements

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

- Signal word danger
- Pictograms

GHS05, GHS08

- Hazard statements

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H373	May cause damage to organs through prolonged or repeated exposure.

- Precautionary statements

P234	Keep only in original container.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P280	Wear protective gloves/protective clothing/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 in accordance with local/regional/national/international regulations.

- Hazardous ingredients for labelling — Tetrasodium EDTA, anhydrous, sodium metasilicate, anhydrous

2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0.1%.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS
2-butoxy-1-ethanol	CAS No 111-76-2	5 – < 12	Acute Tox. 4 / H302 Acute Tox. 4 / H312 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Flam. Liq. 4 / H227
Tetrasodium EDTA, anhydrous	CAS No 64-02-8	1 – < 5	Acute Tox. 4 / H302 Acute Tox. 4 / H332 Eye Dam. 1 / H318 STOT RE 2 / H373
sodium metasilicate, anhydrous	CAS No 6834-92-0	1 – < 5	Acute Tox. 4 / H302 Acute Tox. 3 / H331 Skin Corr. 1 / H314 Eye Dam. 1 / H318 STOT SE 3 / H335

Hazardous ingredients, Consideration of other advice

This table, if present, includes all GHS classified ingredients present above their cut-off limits, even if the finished product is not classified as hazardous by GHS.
Exact percentage of ingredients is withheld as a trade secret.

Remarks

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

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

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

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Substance or mixture corrosive to metals.

Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

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

Use of adsorbent materials.

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.

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.

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

- Corrosive conditions

Store in corrosive resistant container with a resistant inner liner.

Control of the effects

Protect against external exposure, such as

frost

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

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/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
US	2-butoxyethanol	111-76-2	TLV®	20							ACGIH® 2019
US	2-butoxyethanol	111-76-2	REL	5 (10 h)	24 (10 h)					H	NIOSH REL
US	2-butoxyethanol	111-76-2	PEL	50	240					H	29 CFR 1910.1000
US	2-butoxyethanol (EGBE) (glycol monobutyl ether)	111-76-2	PEL (CA)	20	97					H	Cal/OSHA PEL

Notation

Ceiling-C	ceiling value is a limit value above which exposure should not occur
H	absorbed through the skin
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

Biological limit values

Country	Name of agent	Parameter	Notation	Identifier	Value	Source
US	2-butoxyethanol	Butoxyacetic acid (BAA)	hydr, crea	BEI®	200 mg/g	ACGIH® 2019

Notation

crea	creatinine
hydr	hydrolysis

Relevant DNELs of components

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
2-butoxy-1-ethanol	111-76-2	DNEL	75 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
2-butoxy-1-ethanol	111-76-2	DNEL	98 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
2-butoxy-1-ethanol	111-76-2	DNEL	1,091 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
2-butoxy-1-ethanol	111-76-2	DNEL	246 mg/m³	human, inhalatory	worker (industry)	acute - local effects

Relevant DNELs of components

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Tetrasodium EDTA, anhydrous	64-02-8	DNEL	1.5 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Tetrasodium EDTA, anhydrous	64-02-8	DNEL	3 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
Tetrasodium EDTA, anhydrous	64-02-8	DNEL	1.5 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
Tetrasodium EDTA, anhydrous	64-02-8	DNEL	3 mg/m³	human, inhalatory	worker (industry)	acute - local effects
sodium metasilicate, anhydrous	6834-92-0	DNEL	6.2 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
sodium metasilicate, anhydrous	6834-92-0	DNEL	1.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
2-butoxy-1-ethanol	111-76-2	PNEC	463 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
2-butoxy-1-ethanol	111-76-2	PNEC	35 mg/kg	benthic organisms	sediment	short-term (single instance)
2-butoxy-1-ethanol	111-76-2	PNEC	9.1 mg/l	aquatic organisms	water	intermittent release
2-butoxy-1-ethanol	111-76-2	PNEC	8.8 mg/l	aquatic organisms	freshwater	short-term (single instance)
2-butoxy-1-ethanol	111-76-2	PNEC	0.88 mg/l	aquatic organisms	marine water	short-term (single instance)
2-butoxy-1-ethanol	111-76-2	PNEC	463 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2-butoxy-1-ethanol	111-76-2	PNEC	35 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
2-butoxy-1-ethanol	111-76-2	PNEC	3.5 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
2-butoxy-1-ethanol	111-76-2	PNEC	2.3 mg/kg	terrestrial organisms	soil	short-term (single instance)
Tetrasodium EDTA, anhydrous	64-02-8	PNEC	43 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
Tetrasodium EDTA, anhydrous	64-02-8	PNEC	1.2 mg/l	aquatic organisms	water	intermittent release
Tetrasodium EDTA, anhydrous	64-02-8	PNEC	2.8 mg/l	aquatic organisms	freshwater	short-term (single instance)
Tetrasodium EDTA, anhydrous	64-02-8	PNEC	0.28 mg/l	aquatic organisms	marine water	short-term (single instance)
Tetrasodium EDTA, anhydrous	64-02-8	PNEC	50 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)

Relevant PNECs of components						
Name of substance	**CAS No**	**End-point**	**Threshold level**	**Organism**	**Environmental compartment**	**Exposure time**
Tetrasodium EDTA, anhydrous	64-02-8	PNEC	1.1 $^{mg}/_{kg}$	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.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	yellow
Particle	not relevant (liquid)
Odor	fruity

Other safety parameters

pH (value)	>13 (25 °C) (base)
Melting point/freezing point	not determined
Initial boiling point and boiling range	100 °C
Flash point	>100 °C at 101 kPa closed cup
Evaporation rate	Not determined

Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	32 hPa at 25 °C
Density	1 $^{g}/_{ml}$
Vapor density	this information is not available

Solubility(ies)

- Water solubility	miscible in any proportion

Partition coefficient

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

Auto-ignition temperature	230 °C (auto-ignition temperature (liquids and gases))
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none

Temperature class (USA, acc. to NEC 500)	T2D (maximum permissible surface temperature on the equipment: 215°C)

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

No known hazardous reactions.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Oxidizers

Release of flammable materials with:

Light metals (due to the release of hydrogen in an acid/alkaline medium)

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

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

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
2-butoxy-1-ethanol	111-76-2	oral	1,414 $^{mg}/_{kg}$
2-butoxy-1-ethanol	111-76-2	inhalation: vapor	11 $^{mg}/_{l}$/4h
Tetrasodium EDTA, anhydrous	64-02-8	oral	>1,780 $^{mg}/_{kg}$
Tetrasodium EDTA, anhydrous	64-02-8	inhalation: dust/mist	1.5 $^{mg}/_{l}$/4h
sodium metasilicate, anhydrous	6834-92-0	oral	1,349 $^{mg}/_{kg}$
sodium metasilicate, anhydrous	6834-92-0	inhalation: vapor	>2.1 $^{mg}/_{l}$/4h
sodium metasilicate, anhydrous	6834-92-0	inhalation: dust/mist	>0.5 $^{mg}/_{l}$/4h

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.

Carcinogenicity

Shall not be classified as carcinogenic.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

Name of substance	CAS No	Classification	Remarks	Number
2-butoxy-1-ethanol	111-76-2	3		

Legend

3 Not classifiable as to carcinogenicity in humans

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

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

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

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

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0.1%.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

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

DOT	UN 3267
IMDG-Code	UN 3267
ICAO-TI	UN 3267

14.2 UN proper shipping name

DOT	Corrosive liquid, basic, organic, n.o.s.
IMDG-Code	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.
ICAO-TI	Corrosive liquid, basic, organic, n.o.s.
Technical name (hazardous ingredients)	sodium metasilicate, anhydrous, isobutyl acetate

14.3 Transport hazard class(es)

DOT	8

IMDG-Code	8
ICAO-TI	8

14.4 Packing group

DOT	III
IMDG-Code	III
ICAO-TI	III

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 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

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

Particulars in the shipper's declaration	UN3267, Corrosive liquid, basic, organic, n.o.s., (contains: sodium metasilicate, anhydrous, isobutyl acetate), 8, III
Reportable quantity (RQ)	385,654 lbs (175,087 kg) (sodium hydroxide) (isobutyl acetate)
Danger label(s)	8

Special provisions (SP)	IB3, T7, TP1, TP28
ERG No	153

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	-
Danger label(s)	8

Special provisions (SP)	223, 274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-B
Stowage category	A
Segregation group	18 - Alkalis

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s)	8

Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	1 L

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 (ACTIVE) or exempt from listing

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

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
water	7732-18-5	solvent	
2-butoxy-1-ethanol	111-76-2	co-solvent	OEHHA RELs
2-butoxy-1-ethanol			CA TACs
proprietary nonionic surfactant blend	proprietary		
Tetrasodium EDTA, anhydrous	64-02-8	chelate / sequestrant	
sodium metasilicate, anhydrous	6834-92-0	cleaning agent	
sodium hydroxide	1310-73-2	pH adjusting agent	OEHHA RELs
benzaldehyde	100-52-7	fragrance	
Trisodium nitrilotriacetate	5064-31-3	chelate / sequestrant	

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshold	De Minimis Concentration Threshold
2-butoxy-1-ethanol		1022			1.0 %

- Hazardous Substances List (MN-ERTK)

Name of substance	CAS No	References	Remarks
2-butoxy-1-ethanol	111-76-2	A, O	skin

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
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
skin	If a potential for absorption from skin contact merits special consideration, the word "skin" follows the substance name.

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
2-butoxy-1-ethanol	111-76-2		CA F2
2-butoxy-1-ethanol			

Legend

CA	Carcinogenic
F2	Flammable - Second Degree

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

Name acc. to inventory	CAS No	Classification
ETHANOL, 2-BUTOXY-	111-76-2	
GLYCOL ETHERS		E

Legend

E	Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance	CAS No	References
2-butoxy-1-ethanol	111-76-2	T
2-butoxy-1-ethanol	111-76-2	T

Legend

T	Toxicity (ACGIH®)

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

Proposition 65 List of chemicals

Name of substance	Name acc. to inventory	CAS No	Wt%	Remarks	Type of the toxicity
1,4-dioxane	1,4-dioxane	123-91-1	0.0000033		cancer

VOC content

- Regulated Volatile Organic Compounds (VOC-EPA) 5.4 %
- Regulated Volatile Organic Compounds (VOC-Cal ARB) 5.4 %

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	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive

Category	Rating	Description
Personal protection	-	

NFPA® 704

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

Category	Degree of hazard	Description
Flammability	0	material that will not burn under typical fire conditions
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National inventories

Country	Inventory	Status
US	TSCA	all ingredients are listed (ACTIVE)

Legend
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

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
1.2	Relevant identified uses: All-purpose cleaner Concentrate	Relevant identified uses: All-purpose cleaner Concentrate Professional use Industrial use Consumer use (private households)	yes
1.2		Uses advised against: Do not use for squirting or spraying. Do not use for products which come into direct contact with the skin.	yes
2.1		Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200): change in the listing (table)	yes
2.1	The most important adverse physicochemical, human health and environmental effects: Delayed or immediate effects can be expected after short or long-term exposure.	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. Delayed or immediate effects can be expected after short or long-term exposure.	yes
2.2	- Signal word: warning	- Signal word: danger	yes
2.2		- Hazard statements: change in the listing (table)	yes

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.2		- Precautionary statements: change in the listing (table)	yes
2.2	- Hazardous ingredients for labelling: EDTA, anhydrous	- Hazardous ingredients for labelling: Tetrasodium EDTA, anhydrous, sodium metasilicate, anhydrous	yes
2.3	Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0.1%.	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.	yes
3.2		Description of the mixture: change in the listing (table)	yes
3.2	Hazardous ingredients, Consideration of other advice: This table, if present, includes all GHS classified ingredients present above their cut-off limits, even if the finished product is not classified as hazardous by GHS. Exact percentage of ingredients is withheld as a trade secret.For full text of abbreviations: see SECTION 16.	Hazardous ingredients, Consideration of other advice: This table, if present, includes all GHS classified ingredients present above their cut-off limits, even if the finished product is not classified as hazardous by GHS. Exact percentage of ingredients is withheld as a trade secret.	yes
3.2		Remarks: For full text of abbreviations: see SECTION 16.	yes
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
8.1		Relevant DNELs of components: change in the listing (table)	yes
8.1		Relevant PNECs of components: change in the listing (table)	yes
9.1		Particle: not relevant (liquid)	yes
9.1	Flash point: >100 °C at 101.3 kPa closed cup	Flash point: >100 °C at 101 kPa closed cup	yes
9.1	Explosive limits: not determined		yes
9.1	Vapor pressure: 31.69 hPa at 25 °C	Vapor pressure: 32 hPa at 25 °C	yes
9.1	Density: not determined	Density: 1 $^{g}/_{ml}$	yes
9.1	Relative density: information on this property is not available		yes
9.1	Auto-ignition temperature: 230 °C	Auto-ignition temperature: 230 °C (auto-ignition temperature (liquids and gases))	yes
11.1		Acute toxicity estimate (ATE) of components: change in the listing (table)	yes
11.1	Skin corrosion/irritation: Causes skin irritation.	Skin corrosion/irritation: Causes severe skin burns and eye damage.	yes
11.1	Serious eye damage/eye irritation: Causes serious eye irritation.	Serious eye damage/eye irritation: Causes serious eye damage.	yes

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
12.5	Results of PBT and vPvB assessment: Data are not available.	Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0.1%.	yes
12.6	Endocrine disrupting potential: None of the ingredients are listed.	Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.	yes
12.7	Other adverse effects	Other adverse effects: Data are not available.	yes
14.1	UN number: 3266	UN number	yes
14.1		DOT: UN 3267	yes
14.1		IMDG-Code: UN 3267	yes
14.1		ICAO-TI: UN 3267	yes
14.2	UN proper shipping name: Corrosive liquid, basic, inorganic, n.o.s.	UN proper shipping name	yes
14.2		DOT: Corrosive liquid, basic, organic, n.o.s.	yes
14.2		IMDG-Code: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	yes
14.2		ICAO-TI: Corrosive liquid, basic, organic, n.o.s.	yes
14.3	Class: 8 (corrosive substances)		yes
14.3		DOT: 8	yes
14.3		IMDG-Code: 8	yes
14.3		ICAO-TI: 8	yes
14.4	Packing group: III (substance presenting low danger)	Packing group	yes
14.4		DOT: III	yes
14.4		IMDG-Code: III	yes
14.4		ICAO-TI: III	yes
14.7	Index number: 3266		yes
14.7	Proper shipping name: Corrosive liquid, basic, inorganic, n.o.s.		yes
14.7	Particulars in the shipper's declaration: UN3266, Corrosive liquid, basic, inorganic, n.o.s., (contains: sodium metasilicate, anhydrous, isobutyl acetate), 8, III	Particulars in the shipper's declaration: UN3267, Corrosive liquid, basic, organic, n.o.s., (contains: sodium metasilicate, anhydrous, isobutyl acetate), 8, III	yes

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
14.7	Reportable quantity (RQ): 482,921 lbs (219,246 kg) (sodium hydroxide) (1,4-dioxane)	Reportable quantity (RQ): 385,654 lbs (175,087 kg) (sodium hydroxide) (isobutyl acetate)	yes
14.7	Class: 8		yes
14.7	Packing group: III		yes
14.7	ERG No: 154	ERG No: 153	yes
14.7	UN number: 3266		yes
14.7	Proper shipping name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.		yes
14.7	Class: 8		yes
14.7	Packing group: III		yes
14.7	UN number: 3266		yes
14.7	Proper shipping name: Corrosive liquid, basic, inorganic, n.o.s.		yes
14.7	Class: 8		yes
14.7	Packing group: III		yes
15.1		Toxic Substance Control Act (TSCA): all ingredients are listed (ACTIVE) or exempt from listing	yes
15.1	Specific Toxic Chemical Listings (EPCRA Section 313): none of the ingredients are listed		yes
15.1		Cleaning Product Right to Know Act Substance List (CA-RTK): change in the listing (table)	yes
15.1		Hazardous Substance List (NJ-RTK): change in the listing (table)	yes
15.1		Hazardous Substance List (Chapter 323) (PA-RTK): change in the listing (table)	yes
15.1		Hazardous Substance List (RI-RTK): change in the listing (table)	yes
15.1	California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987: none of the ingredients are listed	California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987	yes
15.1		Proposition 65 List of chemicals: change in the listing (table)	yes
15.1	VOC content: Regulated Volatile Organic Compounds (VOC-EPA): 5.43 % Regulated Volatile Organic Compounds (VOC-Cal ARB): 5.43 %	VOC content	yes

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
15.1		Regulated Volatile Organic Compounds (VOC-EPA): 5.4 %	yes
15.1		Regulated Volatile Organic Compounds (VOC-Cal ARB): 5.4 %	yes
15.1		NPCA-HMIS® III: change in the listing (table)	yes
15.1		NFPA® 704: change in the listing (table)	yes
15.1		National inventories: change in the listing (table)	yes
16		Abbreviations and acronyms: change in the listing (table)	yes

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/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
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)
ED	Endocrine disruptor
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
Flam. Liq.	Flammable liquid

Abbr.	Descriptions of used abbreviations
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HHS	Higher hazard substance
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
LHS	Lower hazard substance
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
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
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
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
TLV®	Threshold Limit Values
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

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 (IMDG). 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 section 2 and 3)

Code	Text
H227	Combustible liquid.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

Disclaimer

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