

	e substance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: Heavy Duty Degreaser
Product code	: C-H01
1.2. Relevant identified uses of the	e substance or mixture and uses advised against
Use of the substance/mixture	: All Purpose Degreaser
1.3. Details of the supplier of the s	safety data sheet
HD Chem 707 W. 16th St. Long Beach, CA 90813 T (888) 443-2436 - F (562) 495-7716	
1.4. Emergency telephone numbe	r
Emergency number	: (888) 443-2436
SECTION 2: Hazards identificat	ion
2.1. Classification of the substance	e or mixture
Classification (GHS-US) Skin Irrit. 2 H315 Eye Dam. 1 H318	
Full text of H-phrases: see section 16	
2.2. Label elements	
GHS-US labeling	
	GHS05
Signal word	: Danger
Hazard statements	: Causes skin irritation.
	Causes serious eye damage.
Precautionary statements	: Wash hands and forearms thoroughly after handling.
	Wear eye protection, face protection, protective gloves, protective clothing.
	If on skin: Wash with plenty of water.
	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if presen and easy to do. Continue rinsing.
	Immediately call a POISON CENTER or doctor/physician.
	If skin irritation occurs: Get medical advice/attention.
	Take off contaminated clothing and wash before reuse.
2.3. Hazard not otherwise classifie	ea (HNUC)
No additional information available	
2.4. Unknown acute toxicity (GHS No data available	-05)
	nation on indredients
SECTION 3: Composition/inform 3.1. Substance	

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
2-butoxyethanol	(CAS No) 111-76-2	5 - 10	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
trisodium orthophosphate, dodecahydrate	(CAS No) 10101-89-0	1 - 5	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
disodium metasilicate	(CAS No) 6834-92-0	1 - 5	Skin Corr. 1B, H314 STOT SE 3, H335

(NOTE: If component displays the * (asterisk) symbol, the following statement applies.)

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret SECTION 4: First aid m

SECTION 4. First alu measures	
4.1. Description of first aid measures	
First-aid measures general	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.
First-aid measures after skin contact	If skin irritation or rash occurs: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If eye irritation persists, get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and eff	ects, both acute and delayed
Symptoms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Harmful if swallowed. FOLLOWING SYMPTOMS MAY APPEAR LATER: Irritation of the gastric/intestinal mucosa. Irritation of the oral mucous membranes.

Indication of any immediate medical attention and special treatment needed 4.3.

No additional information available

SECTION 5: Eirofighting measures	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Extinguishing media for surrounding fires. Adapt extinguishing media to the environment.
Unsuitable extinguishing media	: No unsuitable extinguishing media known.
5.2. Special hazards arising from the	substance or mixture
No additional information available	
5.3. Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: No additional information available.
SECTION 6: Accidental release me	easures
6.1. Personal precautions, protective	equipment and emergency procedures
General measures	: Isolate from fire, if possible, without unnecessary risk.
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3.	Methods and material for cor	tainment and cleaning up
Metho	ds for cleaning up	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Colle- spillage. Store away from other materials. Small quantities of liquid spill: neutralize with dilute acid solution.
6.4.	Reference to other sections	
See He	eading 8. Exposure controls and p	ersonal protection.
SECT	FION 7: Handling and stor	age
7.1.	Precautions for safe handling	
Precau	itions for safe handling	Do not get in eyes, on skin, or on clothing. Avoid breathing fume, mist, or vapors. Provide good ventilation in process area to prevent formation of vapor.
Hygien	ne measures	: Wash hands and forearms thoroughly after handling. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2.	Conditions for safe storage,	ncluding any incompatibilities
Techni	cal measures	: Comply with applicable regulations.
Incomp	patible products	: Strong acids. Oxidizing agent.
Storag	e area	: Store in a cool, dry well-ventilated area. Keep container tightly closed when not in use.

SECTION 8: Exposure controls/personal protection

8.1. **Control parameters**

2-butoxyethanol (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	ACGIH STEL (ppm)	20 ppm
OSHA	OSHA PEL (TWA) (mg/m ³)	97 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	20 ppm

8.2. Exposure controls	
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
Other information	: When using, do not eat, drink or smoke.
Appropriate engineering controls	 Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemica 9.1. Information on basic physical and		
Physical state	: Liquid	
Color	: Clear yellow-green	
Odor	: Butyl	
Odor threshold	: No data available	
рН	: 12.25 - 13.25	
Melting point Freezing point	: No data available	
	: No data available	
Boiling point	: >200 °F	
Flash point	: >200 °F	
Relative evaporation rate (butyl acetate=1)	: No data available	
Flammability (solid, gas)	: No data available	
Explosive limits	: No data available	
Vapor pressure	: No data available	
Vapor density	: No data available	
		D 0 (7

Specific Gravity @ 77º F	: 1.032 - 1.052
Solubility	: Water: Complete
Partition Coefficient n-Octanol-Water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
9.2. Other information	
VOC content	: < 75 g/I CARB VOC
SECTION 10: Stability and reactive	/ity
10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
Stable under recommended conditions.	
10.3. Possibility of hazardous reaction	ns
Not established.	
10.4. Conditions to avoid	
Extremely high or low temperatures.	
10.5. Incompatible materials	
Strong acids. Oxidizers.	
10.6. Hazardous decomposition produ	ucts

Carbon monoxide. Carbon dioxide. Sulfur oxides.

1.1. Information on toxicological e	ffects
cute toxicity	: Not classified
trisodium orthophosphate, dodecahy	drate (10101-89-0)
LD50 oral rat	7400 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Literature study; >2000 mg/kg bodyweight; Rat)
LD50 dermal rabbit	> 7940 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 0.83 mg/l/4h (Rat; Read-across)
ATE US (oral)	7400.000 mg/kg body weight
2-butoxyethanol (111-76-2)	
LD50 oral rat	530 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 1746 mg/kg bodyweight Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
LD50 dermal rabbit	435 mg/kg body weight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity; 435 mg/kg bodyweight; Rabbit; Weight of evidence; Equivalent or similar to OECD 402)
LC50 inhalation rat (mg/l)	2.17 mg/l/4h (Rat; Experimental value; 2.35 mg/l/4h; Rat; Experimental value)
LC50 inhalation rat (ppm)	450-486,Rat; Weight of evidence
ATE US (oral)	530.000 mg/kg body weight
ATE US (dermal)	435.000 mg/kg body weight
ATE US (gases)	700.000 ppmV/4h
ATE US (vapors)	2.170 mg/l/4h
ATE US (dust, mist)	2.170 mg/l/4h
disodium metasilicate (6834-92-0)	
LD50 dermal rat	> 5000 mg/kg body weight (Rat; Read-across; OECD 402: Acute Dermal Toxicity)
kin corrosion/irritation	: Causes skin irritation.
	pH: 12.25 - 13.25
erious eye damage/irritation	: Causes serious eye damage.
	pH: 12.25 - 13.25
Respiratory or skin sensitization	: Not classified

Germ cell mutagenicity	: Not classified
	Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
2-butoxyethanol (111-76-2)	
IARC group	3 - Not Classifiable
Reproductive toxicity	: Not classified
	Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Harmful if swallowed. FOLLOWING SYMPTOMS MAY APPEAR LATER: Irritation of the gastric/intestinal mucosa. Irritation of the oral mucous membranes.

SECTION 12: Ecological information

12.1. Toxicity

trisodium orthophosphate, dodecahydrate (10101-89-0)		
LC50 fish 1	2400 mg/l (48 h; Leuciscus idus; Anhydrous form)	
EC50 Daphnia 1	> 100 mg/l (48 h; Daphnia magna)	
LC50 fish 2	220 mg/l (96 h; Lepomis macrochirus; Anhydrous form)	
Threshold limit algae 1	> 100 mg/l (72 h; Desmodesmus subspicatus)	
2-butoxyethanol (111-76-2)		
LC50 fish 1	116 ppm (96 h; Cyprinodon variegatus; Nominal concentration)	
EC50 Daphnia 1	1700 mg/l (48 h; Daphnia sp.; Nominal concentration)	
LC50 fish 2	1341 ppm (96 h; Lepomis macrochirus)	
EC50 Daphnia 2	1720 mg/l (24 h; Daphnia magna)	
TLM fish 1	100 - 1000,96 h; Pisces	
TLM other aquatic organisms 1	100 - 1000,96 h	
Threshold limit algae 1	900 mg/l (168 h; Scenedesmus quadricauda)	
Threshold limit algae 2	35 mg/l (192 h; Microcystis aeruginosa)	
disodium metasilicate (6834-92-0)		
LC50 fish 1	210 mg/l (96 h; Brachydanio rerio)	
EC50 Daphnia 1	216 mg/l (96 h; Daphnia magna; Static system)	
LC50 fish 2	2320 mg/l (96 h; Gambusia affinis)	
EC50 Daphnia 2	632 mg/l (96 h; Lymnaea sp.; Static system)	
Threshold limit algae 1	207 mg/l (72 h; Scenedesmus subspicatus; GLP)	

12.2. Persistence and degradability

trisodium orthophosphate, dodecahydrate (10101-89-0)		
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. No (test) data on mobility of the substance available.	
ThOD	Not applicable (inorganic)	
2-butoxyethanol (111-76-2)		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photodegradation in the air.	
Biochemical oxygen demand (BOD)	0.71 g O2/g substance	
Chemical oxygen demand (COD)	2.20 g O2/g substance	
ThOD	2.305 g O2/g substance	
BOD (% of ThOD)	0.31 % ThOD	

disodium metasilicate (6834-92-0) Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the substance available.	
Biochemical oxygen demand (BOD)		
	Not applicable	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	
12.3. Bioaccumulative potential		
trisodium orthophosphate, dodecahydrate (10101-89-0)		
Bioaccumulative potential	Not bioaccumulative.	
2-butoxyethanol (111-76-2)		
Log Pow	0.81 (Experimental value; BASF test; 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
disodium metasilicate (6834-92-0)		
Bioaccumulative potential	Bioaccumulation: not applicable.	
12.4. Other adverse effects		
Other information	: Avoid release to the environment.	
SECTION 13: Disposal consideration	S	
13.1. Waste treatment methods		
Waste disposal recommendations	: Dispose of contents/container in accordance with Local, State, and Federal regulations.	
Ecology - waste materials	: Avoid release to the environment.	
SECTION 14: Transport information		
·		
14.1. UN Number		
UN-No.(DOT)	: Not Regulated	
Other information	: No supplementary information available	
14.2. UN proper shipping name		
DOT Proper Shipping Name		
SECTION 15: Regulatory information	: Not Regulated	
	-	
	-	
	-	
15.1. US Federal regulations	-	
15.1. US Federal regulations	Toxic Substances Control Act (TSCA) inventory except for:	
All components of this product are listed on the trisodium orthophosphate, dodecahydrate	Toxic Substances Control Act (TSCA) inventory except for: CAS No 10101-89-0 3.00%	
15.1. US Federal regulations All components of this product are listed on the trisodium orthophosphate, dodecahydrate trisodium orthophosphate, dodecahydrate (1	Toxic Substances Control Act (TSCA) inventory except for: CAS No 10101-89-0 3.00% 0101-89-0)	
15.1. US Federal regulations All components of this product are listed on the trisodium orthophosphate, dodecahydrate trisodium orthophosphate, dodecahydrate (1	Toxic Substances Control Act (TSCA) inventory except for: CAS No 10101-89-0 3.00% 0101-89-0) ars on the U.S. EPA TSCA Inventory under the cas# representing the anhydrous form of this	
15.1. US Federal regulations All components of this product are listed on the trisodium orthophosphate, dodecahydrate trisodium orthophosphate, dodecahydrate (1 Trisodium orthophosphate dodecahydrate appea material (7601-54-9 trisodium phosphate, crysta RQ (Reportable quantity, section 101(14) of	Toxic Substances Control Act (TSCA) inventory except for: CAS No 10101-89-0 3.00% 0101-89-0) ars on the U.S. EPA TSCA Inventory under the cas# representing the anhydrous form of this	
15.1. US Federal regulations All components of this product are listed on the trisodium orthophosphate, dodecahydrate trisodium orthophosphate, dodecahydrate (1 Trisodium orthophosphate dodecahydrate appearaterial (7601-54-9 trisodium phosphate, crystar RQ (Reportable quantity, section 101(14) of CERCLA as published on EPA's List of Lists) :	Toxic Substances Control Act (TSCA) inventory except for: CAS No 10101-89-0 3.00% 0101-89-0) ars on the U.S. EPA TSCA Inventory under the cas# representing the anhydrous form of this Illine). 5000 lb	
15.1. US Federal regulations All components of this product are listed on the trisodium orthophosphate, dodecahydrate trisodium orthophosphate, dodecahydrate (1 Trisodium orthophosphate dodecahydrate appearmaterial (7601-54-9 trisodium phosphate, crysta RQ (Reportable quantity, section 101(14) of CERCLA as published on EPA's List of Lists) : SARA Section 311/312 Hazard Classes	Toxic Substances Control Act (TSCA) inventory except for: CAS No 10101-89-0 3.00% 0101-89-0) ars on the U.S. EPA TSCA Inventory under the cas# representing the anhydrous form of this ulline).	
15.1. US Federal regulations All components of this product are listed on the trisodium orthophosphate, dodecahydrate trisodium orthophosphate, dodecahydrate (1 Trisodium orthophosphate, dodecahydrate appermaterial (7601-54-9 trisodium phosphate, crysta RQ (Reportable quantity, section 101(14) of CERCLA as published on EPA's List of Lists) : SARA Section 311/312 Hazard Classes 2-butoxyethanol (111-76-2) Listed on the United States TSCA (Toxic Substate)	Toxic Substances Control Act (TSCA) inventory except for: CAS No 10101-89-0 3.00% 0101-89-0) ars on the U.S. EPA TSCA Inventory under the cas# representing the anhydrous form of this Illine). 5000 lb Immediate (acute) health hazard ances Control Act) inventory	
15.1. US Federal regulations All components of this product are listed on the trisodium orthophosphate, dodecahydrate trisodium orthophosphate, dodecahydrate (1 Trisodium orthophosphate dodecahydrate appea material (7601-54-9 trisodium phosphate, crysta RQ (Reportable quantity, section 101(14) of CERCLA as published on EPA's List of Lists) : SARA Section 311/312 Hazard Classes 2-butoxyethanol (111-76-2)	Toxic Substances Control Act (TSCA) inventory except for: CAS No 10101-89-0 3.00% 0101-89-0) ars on the U.S. EPA TSCA Inventory under the cas# representing the anhydrous form of this Illine). 5000 lb Immediate (acute) health hazard ances Control Act) inventory	
15.1. US Federal regulations All components of this product are listed on the trisodium orthophosphate, dodecahydrate trisodium orthophosphate, dodecahydrate (1 Trisodium orthophosphate dodecahydrate appearmaterial (7601-54-9 trisodium phosphate, crysta RQ (Reportable quantity, section 101(14) of CERCLA as published on EPA's List of Lists) : SARA Section 311/312 Hazard Classes 2-butoxyethanol (111-76-2) Listed on the United States TSCA (Toxic Substatisted on SARA Section 313 (Specific toxic cherts) SARA Section 311/312 Hazard Classes	Toxic Substances Control Act (TSCA) inventory except for: CAS No 10101-89-0 3.00% 0101-89-0) ars on the U.S. EPA TSCA Inventory under the cas# representing the anhydrous form of this Uline). 5000 lb Immediate (acute) health hazard ances Control Act) inventory mical listings) Fire hazard Immediate (acute) health hazard	
 15.1. US Federal regulations All components of this product are listed on the trisodium orthophosphate, dodecahydrate trisodium orthophosphate, dodecahydrate (1) Trisodium orthophosphate dodecahydrate appearmaterial (7601-54-9 trisodium phosphate, crysta RQ (Reportable quantity, section 101(14) of CERCLA as published on EPA's List of Lists) : SARA Section 311/312 Hazard Classes 2-butoxyethanol (111-76-2) Listed on the United States TSCA (Toxic Substat Listed on SARA Section 313 (Specific toxic cher 	Toxic Substances Control Act (TSCA) inventory except for: CAS No 10101-89-0 3.00% 0101-89-0) ars on the U.S. EPA TSCA Inventory under the cas# representing the anhydrous form of this Illine). 5000 lb Immediate (acute) health hazard ances Control Act) inventory mical listings) Fire hazard Immediate (acute) health hazard Eistings Fire hazard Immediate (acute) health hazard	

Heavy Duty Degreaser

Safety Data Sheet

15.2. International regulations

CANADA

EU-Regulations No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

trisodium orthophosphate, dodecahydrate (10101-89-0)

Trisodium orthophosphate dodecahydrate appears on the U.S. EPA TSCA Inventory under the cas# representing the anhydrous form of this material (7601-54-9 trisodium phosphate, crystalline).

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

Abbreviations Legend:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 4	Flammable liquids Category 4
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H227	Combustible liquid
H302	Harmful if swallowed
H311	Toxic 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

Disclaimer

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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