

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 360(E) Phosphate-Free Cleaner

Revision date: 02.07.2018

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#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

360(E) Phosphate-Free Cleaner

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

###### Use of the substance/mixture

Water based cleaner. Non flammable.

###### Uses advised against

No information available.

##### 1.3. Details of the supplier of the safety data sheet

Company name:	Chesterton International GmbH	
Street:	Am Lenzenfleck 23	
Place:	DE-85737 Ismaning GERMANY	
Telephone:	+49 89 99 65 46 - 0	Telefax: +49 89 99 65 46 - 50
e-mail:	eu-sds@chesterton.com	
e-mail (Contact person):	eu-sds@chesterton.com	
Internet:	www.chesterton.com	
Responsible Department:	eu-sds@chesterton.com	

##### 1.4. Emergency telephone number:

+49(0) 551 - 1 92 40 (GIZ-Nord, 24h)

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes severe skin burns and eye damage.

Causes serious eye damage.

##### 2.2. Label elements

###### Regulation (EC) No. 1272/2008

###### Hazard components for labelling

disodium metasilicate

tetrasodium ethylene diamine tetraacetate

Sodium hydroxide; caustic soda

**Signal word:** Danger

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#### Pictograms:



#### Hazard statements

H314 Causes severe skin burns and eye damage.

#### Precautionary statements

P260 Do not breathe vapour/aerosol.  
 P264 Wash hands thoroughly after handling.  
 P280 Wear protective gloves and eye/face protection.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 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.

#### 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
6834-92-0	disodium metasilicate	1-5 %
	229-912-9	
	014-010-00-8	
	01-2119449811-37	
	Met. Corr. 1, Skin Corr. 1B, STOT SE 3; H290 H314 H335	
64-02-8	tetrasodium ethylene diamine tetraacetate	1-5 %
	200-573-9	
	607-428-00-2	
	01-2119486762-27	
	Acute Tox. 4, Eye Dam. 1; H302 H318	
1310-73-2	Sodium hydroxide; caustic soda	1-5 %
	215-185-5	
	011-002-00-6	
	01-2119457892-27	
	Skin Corr. 1A; H314	

Full text of H and EUH statements: see section 16.

#### Labelling for contents according to Regulation (EC) No 648/2004

< 5 % anionic surfactants.

#### Further Information

No information available.

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#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

###### **General information**

Change contaminated, saturated clothing. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

###### **After inhalation**

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a doctor.

###### **After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

###### **After contact with eyes**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

###### **After ingestion**

Do NOT induce vomiting.  
Immediately call a doctor.

##### 4.2. Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage.

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

First Aid, decontamination, treatment of symptoms.

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

###### **Suitable extinguishing media**

Dry extinguishing powder. Carbon dioxide (CO<sub>2</sub>). alcohol resistant foam. Water spray jet

###### **Unsuitable extinguishing media**

Full water jet

##### 5.2. Special hazards arising from the substance or mixture

No information available.

##### 5.3. Advice for firefighters

Special protective equipment for firefighters Protective clothing.  
In case of fire: Wear self-contained breathing apparatus.  
Co-ordinate fire-fighting measures to the fire surroundings.

###### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### SECTION 6: Accidental release measures

##### 6.1. Personal precautions, protective equipment and emergency procedures

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See protective measures under point 7 and 8.  
Provide adequate ventilation.  
Personal protection equipment: see section 8

#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Cover drains.

#### **6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### **6.4. Reference to other sections**

See protective measures under point 7 and 8.  
Disposal: see section 13

### SECTION 7: Handling and storage

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

See section 8. Wear personal protection equipment (refer to section 8).

##### **Advice on protection against fire and explosion**

No special measures are necessary.

##### **Further information on handling**

Keep container tightly closed and dry.

#### **7.2. Conditions for safe storage, including any incompatibilities**

##### **Requirements for storage rooms and vessels**

Store in a cool dry place. Keep container tightly closed.  
Keep/Store only in original container.  
Protect against direct sunlight.  
Protect against: Frost

#### **7.3. Specific end use(s)**

No information available.

### SECTION 8: Exposure controls/personal protection

#### **8.1. Control parameters**

##### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
1310-73-2	Sodium hydroxide	-	-		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

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#### DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
6834-92-0	disodium metasilicate		
Worker DNEL, long-term	inhalation	systemic	6,22 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic	1,49 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	1,55 mg/m <sup>3</sup>
Consumer DNEL, long-term	dermal	systemic	0,74 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,74 mg/kg bw/day
64-02-8	tetrasodium ethylene diamine tetraacetate		
Worker DNEL, long-term	inhalation	local	1,5 mg/m <sup>3</sup>
Worker DNEL, acute	inhalation	local	3 mg/m <sup>3</sup>
Consumer DNEL, long-term	inhalation	local	0,6 mg/m <sup>3</sup>
Consumer DNEL, acute	inhalation	local	1,2 mg/m <sup>3</sup>
Consumer DNEL, long-term	oral	systemic	25 mg/kg bw/day
1310-73-2	Sodium hydroxide; caustic soda		
Worker DNEL, long-term	inhalation	local	1 mg/m <sup>3</sup>
Consumer DNEL, long-term	inhalation	local	1 mg/m <sup>3</sup>

#### PNEC values

CAS No	Substance	
Environmental compartment	Value	
6834-92-0	disodium metasilicate	
Freshwater	7,5 mg/l	
Freshwater (intermittent releases)	7,5 mg/l	
Marine water	1 mg/l	
Micro-organisms in sewage treatment plants (STP)	1000 mg/l	
64-02-8	tetrasodium ethylene diamine tetraacetate	
Freshwater	2,2 mg/l	
Freshwater (intermittent releases)	1,2 mg/l	
Marine water	0,22 mg/l	
Micro-organisms in sewage treatment plants (STP)	43 mg/l	
Soil	0,72 mg/kg	

#### **8.2. Exposure controls**

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#### Appropriate engineering controls

Use only in well-ventilated areas.  
Provide adequate ventilation as well as local exhaustion at critical locations.

#### Protective and hygiene measures

Only wear fitting, comfortable and clean protective clothing. Avoid contact with skin, eyes and clothes. Wash hands and face before breaks and after work and take a shower if necessary.  
When using do not eat, drink or smoke.

#### Eye/face protection

Suitable eye protection:  
Eye glasses with side protection  
goggles

#### Hand protection

Tested protective gloves must be worn: DIN EN 374  
NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)  
Thickness of the glove material  $\geq 0,4$  mm  
Breakthrough times and swelling properties of the material must be taken into consideration.  
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.  
Observe the wear time limits as specified by the manufacturer.

#### Skin protection

Protective clothing, Rubber boots, Apron

#### Respiratory protection

Usually no personal respirative protection necessary.  
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.  
Filtering device (full mask or mouthpiece) with filter: A-P2

#### Environmental exposure controls

No special measures are necessary.

### SECTION 9: Physical and chemical properties

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

Physical state:	Liquid
Colour:	blue
Odour:	mild

pH-Value:	>13	<b>Test method</b>
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#### Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	100 °C
Sublimation point:	not determined

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Softening point: not determined  
Pour point: not determined  
Flash point: not applicable

#### Flammability

Solid: not determined  
Gas: not determined

#### Explosive properties

not explosive according to EU A.14

Lower explosion limits: not determined  
Upper explosion limits: not determined  
Ignition temperature: not determined

#### Auto-ignition temperature

Solid: not determined  
Gas: not determined

Decomposition temperature: not determined

#### Oxidizing properties

No information available.

Vapour pressure:  
(at 20 °C) not determined

Density (at 20 °C): 1,067 g/cm<sup>3</sup>

Water solubility: completely miscible

#### Solubility in other solvents

No information available.

Partition coefficient: >1

Viscosity / dynamic: not determined

Vapour density: >1 (air = 1)

Evaporation rate: <1 (Ether = 1)

#### 9.2. Other information

No information available.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

#### 10.2. Chemical stability

The substance is chemically stable under recommended conditions of storage, use and temperature.

#### 10.3. Possibility of hazardous reactions

This material is considered to be non-reactive under normal use conditions.

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#### **10.4. Conditions to avoid**

No information available.

#### **10.5. Incompatible materials**

Oxidising agent, strong; Aluminium; Zinc

#### **10.6. Hazardous decomposition products**

Nitrogen oxides (NOx), Carbon dioxide (CO<sub>2</sub>), Carbon monoxide

### SECTION 11: Toxicological information

#### **11.1. Information on toxicological effects**

##### **Acute toxicity**

Based on available data, the classification criteria are not met.

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
6834-92-0	disodium metasilicate					
	oral	LD50 mg/kg	770 - 820	Mouse	Toxicol. Lett. 31 (Suppl. P1-28), 44 (19)	Standard acute oral toxicity
	dermal	LD50 mg/kg	> 5000	Rat	Study report (2004)	EPA OPPTS 870.1200
	inhalation (4 h) vapour	LC50 mg/l	> 2,06	Rat	Study report (2004)	EPA OPPTS 870.1300
64-02-8	tetrasodium ethylene diamine tetraacetate					
	oral	LD50 mg/kg	1913	Rat	Study report (1983)	BASF-TEST: In principle, the methods des

##### **Irritation and corrosivity**

Causes severe skin burns and eye damage.

##### **Sensitising effects**

Based on available data, the classification criteria are not met.

##### **Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

##### **STOT-single exposure**

Based on available data, the classification criteria are not met.

##### **STOT-repeated exposure**

Based on available data, the classification criteria are not met.

##### **Aspiration hazard**

Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

#### **12.1. Toxicity**



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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
6834-92-0	disodium metasilicate					
	Acute fish toxicity	LC50 260 - 310 mg/l	96 h	Oncorhynchus mykiss	Suishitsu Odaku Kenkyu 12(3): 177-184 (1)	Method: other: no method cited
	Acute algae toxicity	ErC50 207 mg/l	72 h	Desmodesmus subspicatus	SIDS Initial Assessment Report for SIAM	other: DIN 38412, Teil 9
	Acute crustacea toxicity	EC50 1700 mg/l	48 h	Daphnia magna	REACH Registration Dossier	EU Method C.2
	Acute bacteria toxicity	(> 100 mg/l)	3 h	activated sludge, domestic	Study report (1994)	OECD Guideline 209
64-02-8	tetrasodium ethylene diamine tetraacetate					
	Acute fish toxicity	LC50 41 mg/l	96 h	Lepomis macrochirus	Bull. Environm. Contam. Toxicol. 24: 543	The static water acute toxicity tests fo
	Acute algae toxicity	ErC50 > 100 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (2001)	OECD Guideline 201
	Acute crustacea toxicity	EC50 140 mg/l	48 h	Daphnia magna	Study report (1989)	other: DIN 38412, part 11
	Fish toxicity	NOEC >= 25,7 mg/l	35 d	Danio rerio	Study report (2001)	OECD Guideline 210
	Crustacea toxicity	NOEC 25 mg/l	21 d	Daphnia magna	Study report (1998)	other: EEC Guideline XI/681/86, Draft 4:
1310-73-2	Sodium hydroxide; caustic soda					
	Acute crustacea toxicity	EC50 40,4 mg/l	48 h	Ceriodaphnia sp.	Ecotoxicology and Environmental Safety,4	other: acute 48-h immobilization test ac

#### 12.2. Persistence and degradability

No information available.

#### 12.3. Bioaccumulative potential

##### BCF

CAS No	Chemical name	BCF	Species	Source
64-02-8	tetrasodium ethylene diamine tetraacetate	ca. 1,8	Lepomis macrochirus	Proc. 3rd. Ann. Symp

#### 12.4. Mobility in soil

No information available.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

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#### **12.6. Other adverse effects**

No information available.

### **SECTION 13: Disposal considerations**

#### **13.1. Waste treatment methods**

##### **Advice on disposal**

Dispose of waste according to applicable legislation.

##### **Contaminated packaging**

Dispose of waste according to applicable legislation.

### **SECTION 14: Transport information**

#### **Land transport (ADR/RID)**

<b><u>14.1. UN number:</u></b>	UN 1760
<b><u>14.2. UN proper shipping name:</u></b>	CORROSIVE LIQUID, N.O.S. (disodium metasilicate)
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	8
Classification code:	C9
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E

#### **Inland waterways transport (ADN)**

<b><u>14.1. UN number:</u></b>	UN 1760
<b><u>14.2. UN proper shipping name:</u></b>	CORROSIVE LIQUID, N.O.S. (disodium metasilicate)
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	8
Classification code:	C9
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1

#### **Marine transport (IMDG)**

<b><u>14.1. UN number:</u></b>	UN 1760
<b><u>14.2. UN proper shipping name:</u></b>	CORROSIVE LIQUID, N.O.S. (disodium metasilicate)
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	III

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Hazard label: 8  
Special Provisions: 223, 274  
Limited quantity: 5 L  
Excepted quantity: E1  
EmS: F-A, S-B  
Segregation group: alkalis

#### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 1760  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, N.O.S. (disodium metasilicate)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
Hazard label: 8  
Special Provisions: A3 A803  
Limited quantity Passenger: 1 L  
Passenger LQ: Y841  
Excepted quantity: E1  
IATA-packing instructions - Passenger: 852  
IATA-max. quantity - Passenger: 5 L  
IATA-packing instructions - Cargo: 856  
IATA-max. quantity - Cargo: 60 L

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

No information available.

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No information available.

### SECTION 15: Regulatory information

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

##### National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

#### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

disodium metasilicate  
tetrasodium ethylene diamine tetraacetate  
Sodium hydroxide; caustic soda

### SECTION 16: Other information

#### Abbreviations and acronyms

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ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer  
(Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
EC50: Effectice concentration, 50 percent  
DNEL: Derived No Effect Level  
PNEC: Predicted No Effect Concentration  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

#### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Corr. 1; H314	Calculation method
Eye Dam. 1; H318	Calculation method

#### Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

#### Further Information

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself.  
No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose.  
The user must make their own determination as to suitability.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*