

TORNADO

Safety Data Sheet C-723B

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 11/23/2015

Revision date: 05/14/2015

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : TORNADO
Product code : C-723B

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

Use of the substance/mixture : Drain openers

1.3. Details of the supplier of the safety data sheet

QUALCHEM CORP.
2220 OTAY LAKES ROAD #502
CHULA VISTA, CA 91915
T 866-932-6168 - F 877-504-0955

1.4. Emergency telephone number

Emergency number : CHEM TEL 800-255-3924

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

| | |
|--|--|
| Porphoric Solids, Category 1 | Catches fire spontaneously if exposed to air |
| Substances and Mixtures which, in contact with water, emit flammable gases, Category 2 | In contact with water releases flammable gases |
| Skin corrosion/irritation, Category 1A | Causes severe skin burns and eye damage |
| Serious eye damage/eye irritation, Category 1 | Causes serious eye damage |

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger

Contains : Caustic Soda

Hazard statements (GHS-US) : In contact with water releases flammable gases
Causes severe skin burns and eye damage

Precautionary statements (GHS-US) : Keep away from heat, hot surfaces, open flames. - No smoking
Do not allow contact with water
Do not breathe vapours, spray, mist, fume
Wash hands, forearms and face thoroughly after handling
Wear eye protection, face protection, protective gloves
If swallowed: rinse mouth. Do NOT induce vomiting
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
If inhaled: Remove person to fresh air and keep comfortable for breathing
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a doctor
Specific treatment (see First Aid measures on this label)
Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages
Wash contaminated clothing before reuse
In case of fire: Use ABC-powder to extinguish
Store in a dry place. Store in a closed container
Store locked up

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Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards

Other hazards not contributing to the classification : Reacts violently with water.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | GHS-US classification |
|----------------|--------------------|-------------|---|
| Caustic Soda | (CAS No) 1310-73-2 | 58.8 - 78.4 | Met. Corr. 1, H290 Skin Corr. 1A, H314 |
| sodium nitrate | (CAS No) 7631-99-4 | 5 - 20 | Ox. Sol. 3, H272 Acute Tox. 4 (Oral), H302 |

Full text of H-statements: see section 16

SECTION 4: First aid 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 : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after eye contact : 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. Immediately call a POISON CENTER or doctor/physician.

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

- Symptoms/injuries : Causes severe skin burns and eye damage.
- Symptoms/injuries after eye contact : Causes serious eye damage.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
- Reactivity : Corrosive vapours.

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. Fight fire remotely due to the risk of explosion.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : No open flames. No smoking.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

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6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Hazardous waste due to potential risk of explosion.
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Take any precaution to avoid mixing with combustible materials. Do not breathe vapours, spray, mist, fume, dust. Avoid contact during pregnancy/while nursing.
Hygiene measures : Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.
Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use. Keep in fireproof place.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight. Heat sources. combustible materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Caustic Soda (1310-73-2) | | |
|----------------------------|-------------------------------------|----------------------|
| ACGIH | ACGIH Ceiling (mg/m ³) | 2 mg/m ³ |
| ACGIH | Remark (ACGIH) | URT, eye, & skin irr |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 2 mg/m ³ |
| sodium nitrate (7631-99-4) | | |
| Not applicable | | |

8.2. Exposure controls

Personal protective equipment : Safety glasses. Protective clothing. Gloves. Face shield.



Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or face shield.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : Wear appropriate mask.
Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Colour : White red Purple
Odour : characteristic
Odour threshold : No data available

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| | |
|--|--|
| pH | : >= 13 |
| pH solution | : >= 13 |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Flammability (solid, gas) | : No data available |
| Explosive limits | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : May intensify fire; oxidiser. |
| Vapour pressure | : No data available |
| Relative density | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Solubility | : Water: Solubility in water of component(s) of the mixture : • sodium nitrate: 874 g/l |
| Log Pow | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive vapours.

10.2. Chemical stability

May intensify fire; oxidiser.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Overheating. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

| sodium nitrate (7631-99-4) | |
|----------------------------|---|
| LD50 oral rat | 1270 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 3430 mg/kg bodyweight; Rat) |
| LD50 dermal rat | > 5000 mg/kg bodyweight (Rat; Read-across; OECD 402: Acute Dermal Toxicity) |
| ATE US (oral) | 1270.000 mg/kg bodyweight |

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: >= 13

Serious eye damage/irritation : Causes serious eye damage.

pH: >= 13

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| | |
|---|---|
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| 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 eye contact | : Causes serious eye damage. |

SECTION 12: Ecological information

12.1. Toxicity

| sodium nitrate (7631-99-4) | |
|--------------------------------|--|
| EC50 other aquatic organisms 1 | > 1700 mg/l (10 days; Algae; EC50; Other) |
| LC50 fish 2 | 4650 mg/l (LC50; Other; 96 h; Salmo gairdneri; Static system; Fresh water; Experimental value) |
| EC50 Daphnia 2 | 7240 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 24 h; Daphnia magna; Static system; Fresh water; Experimental value) |

12.2. Persistence and degradability

| TORNADO | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

| Caustic Soda (1310-73-2) | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

| sodium nitrate (7631-99-4) | |
|---------------------------------|---|
| 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 |

12.3. Bioaccumulative potential

| TORNADO | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

| Caustic Soda (1310-73-2) | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

| sodium nitrate (7631-99-4) | |
|----------------------------|----------------------------------|
| Log Pow | -3.8 |
| Bioaccumulative potential | Bioaccumulation: not applicable. |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

| | |
|------------------------------|--|
| Effect on the global warming | : No known ecological damage caused by this product. |
| Other information | : Avoid release to the environment. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|--------------------------------|--|
| Waste disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to an approved waste disposal plant. |
|--------------------------------|--|

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Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1823 Sodium hydroxide, solid, 8, II
UN-No.(DOT) : UN1823
Proper Shipping Name (DOT) : Sodium hydroxide, solid
Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136
Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : II - Medium Danger
DOT Packaging Bulk (49 CFR 173.xxx) : 240
DOT Packaging Exceptions (49 CFR 173.xxx) : 154
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 15 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 50 kg
DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel
DOT Vessel Stowage Other : 52 - Stow "separated from" acids
Emergency Response Guide (ERG) Number : 154
Other information : No supplementary information available.

TDG

No additional information available

Transport by sea

UN-No. (IMDG) : 1823
Proper Shipping Name (IMDG) : SODIUM HYDROXIDE, SOLID
Class (IMDG) : 8 - Corrosive substances
Packing group (IMDG) : II - substances presenting medium danger

Air transport

UN-No. (IATA) : 1823
Proper Shipping Name (IATA) : Sodium hydroxide, solid
Class (IATA) : 8 - Corrosives
Packing group (IATA) : II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

TORNADO

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Caustic Soda (1310-73-2)

CERCLA RQ : 1000 lb

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15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

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

Caustic Soda (1310-73-2)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Revision date : 05/14/2015

Other information : None.

Full text of H-statements:

| | |
|------|--|
| H250 | Catches fire spontaneously if exposed to air |
| H261 | In contact with water releases flammable gases |
| H272 | May intensify fire; oxidiser |
| H290 | May be corrosive to metals |
| H302 | Harmful if swallowed |
| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage |

NFPA health hazard

: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

: 2 - Normally unstable and readily undergo violent decomposition but do not detonate. Also: may react violently with water or may form potentially explosive mixtures with water.

NFPA specific hazard

: W - Unusual reactivity with water. This indicates a potential hazard using water to fight a fire involving this material. When a compound is both water-reactive and an oxidizer, the W/bar symbol should go in this quadrant and the OX warning is placed immediately below the NFPA diamond.



HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability

: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical

: 2 Moderate Hazard - 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

: o,B
o - Face shield and eye protection
B - Safety glasses, Gloves

SDS US (GHS HazCom 2012)

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