

Section 1 - IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product identifier

- **Product Name :** C-3 (3 יב)

1.2 Relevant identified uses of the substances or mixture and used advised against

- **Recommended use :** Alkaline cleaner & disinfectant
- **Recommended restrictions :** For industrial use only

1.3 Details of supplier of the safety data sheet :

- **Manufacturer Details:** ZOHAR DALIA C.A.A. Ltd.,
Kibbutz Dalia 1923900, Israel
Tel. 972-4-9897234
Fax 972-4-9897200

1.4 Emergency telephone number :

- **Emergency Telephone & Contact:** Tel: +972-4-9897515

Section 2 - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture according to Regulation (EC) No 1272/2008 (CLP)

Human health hazard categories and codes:	Skin corrosion	category 1A
	Eye damage	Category 1
Environmental hazard categories and codes:	Aquatic Acute	category 1

2.2 Labeling according to Regulation (EC) No 1272/2008 (CLP)

- **Hazard Pictogram :** **SIGNAL WORD: Danger**



GHS05
Corrosion



GHS09
Environment

- **Hazard Statements :** H314: Causes severe skin burns and eye damage.
H400: Very toxic to aquatic life

- **Precautionary Statements:** P260: Do not breathe dust/fume/gas/mist/vapours/spray
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P310: Immediately call a POISON CENTER/doctor if you feel unwell.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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.
P391: Collect spillage.

P501: Dispose of contents/container to an approval waste disposal plant

2.3. Other hazards

Not known

Section 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Constituent	CAS No.	EC No.	Concentration range	Classification according to Regulation (EC) No 1272/2008 (CLP)	Remarks
Sodium Hydroxide	1310-73-2	215-185-5	>=5.0 % < 15.0 %	Skin Corr. 1A; H314	H314: C ≥ 5%
Sodium Hypochlorite	7681-52-9	231-668-3	>=1.0% < 5.0 %	Skin Corr. 1B; H314 Aquatic Acute 1; H400	None

Section 4 - FIRST AID MEASURES

4.1 Description of First Aid measures:

- **General measures** : Take off all contaminated clothing immediately. In the case of accident or if you feel unwell, seek medical advice immediately.
- **Eye contact** : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist..
- **Skin Contact** : Wash off immediately with plenty of water for at least 15 minutes.
Take off all contaminated clothing immediately.
Consult a physician.
- **Inhalation** : Remove from exposure, lie down.
If breathing is irregular or stopped, administer artificial respiration.
Monitor breathing, give oxygen if necessary.
Consult a physician.
- **Ingestion** : If swallowed, rinse mouth with water (only if the person is conscious).

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

- In all cases of doubt, or when symptoms persist, seek medical advice.

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

- Advice to physician: symptomatic treatment is advised.
- Eye rinsing device shall be made available at any point of handling of the product.

Section 5 - FIRE-FIGHTING MEASURES

5.1. Extinguishing media:

Suitable extinguishing media: Water spray, Dry powder, Foam, Carbon dioxide (CO₂)

Unsuitable extinguishing media: None known

5.2. Special hazards arising from the substance or mixture: Not combustible. Gives off irritating or toxic fumes in a fire.

5.3. Advice for fire-fighters

- Use fire fighting water moderately and contain it.
- Use water spray to cool tanks/containers exposed to heat / remove them into safety.
- In the event of fire, wear self-contained breathing apparatus.
- Use personal protective equipment.
- Wear chemical resistant oversuit

Section 6 - ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

- **Personal Protective Equipment :** Wear self-contained breathing apparatus in case of fire.
Wear corrosion-proof suit
- **Eye Protection :** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- **Skin Protection :** Avoid contact with skin by use of protective equipment. (as mentioned in section 8.2)
- **Respiratory Protection :** Wear personal protective equipment. (as mentioned in section 8.2)
- **Work Practices :** Wear eye/face protection.

6.2. Environmental precautions:

- Should not be released into the environment.
- Do not flush into surface water or sanitary sewer system.
- If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and material for containment and cleaning:

- Recovery: Pump into a clean labelled emergency container after cleaning, flush away traces with water. recover water for later processing
- Large spillage – pump onto plastic containers and rework/dispose as per local legislation.
- Small spillage – use non-combustible absorbent and shovel into container for disposal.
- Neutralization: Neutralize contaminated water with a suitable solvent
- Equipment must be corrosion resistant.

Section 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling

- Observe strict hygiene - avoid eye and skin contact.
- Avoid splashing of material.
- Safety showers should be readily available in handling and storage areas.

- Eye wash fountains should be located in the work areas and should be immediately accessible for emergency use.
- Remove contaminated clothing immediately.
- Use only equipment and materials which are compatible with the product.
- To avoid thermal decomposition, do not overheat.
- Do not mix with ammonia or acids as hazardous fumes may result.
- Do not reuse empty bottle.

7.2 Conditions for safe storage:

- Store in original container.
- Keep in a cool, dry, well-ventilated place.
- Keep in properly labelled containers.
- Keep container closed.
- Keep away from incompatible products.

7.3 Specific end use(s):

- As prescribed in section 1.2

Section 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Not Applicable.

8.2 Exposure Control:

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|----------------------------------|---|
| • Engineering measures: | Ensure adequate ventilation, especially in confined areas. |
| • Respiratory Protection: | In case of insufficient ventilation, wear suitable respiratory equipment.
In the case of hazardous fumes, wear self-contained breathing apparatus. |
| • Hand Protection: | Splash contact, intermittent and prolonged PVC gloves |
| • Eye protection: | Safety glasses with side-shields |
| • Skin protection: | waterproof suit, Complete chemical protection suit, Boots |
| • Protective measures : | Wear suitable gloves and eye/face protection. Avoid contact with the skin and the eyes. General industrial hygiene practice. |

Section 9 – PHYSICAL & CHEMICAL PROPERTIES:

9.1 Information on basic physical and chemical properties:

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|---|------------------|
| • Appearance: | Yellowish Liquid |
| • Odour: | Characteristic |
| • Odour threshold: | N.A. |
| • pH (2% in water): | 12.0 – 13.0 |
| • Melting point/Freezing point: | N.A. |
| • Initial boiling point and boiling range: | > 100 °C |
| • Flash point: | N.A. |
| • Evaporation rate: | N.A) |

- | | |
|--|-------------------------------|
| • Flammability(solid/gas): | N.A. |
| • Upper/lower flammability or explosive limits: | N.A. |
| • Vapour pressure: | N.A. |
| • Vapour density: | N.A. |
| • Relative density: | 1.2 g/ml |
| • Solubility(ies) : | Miscible (in all proportions) |
| • Partition coefficient: n-octanol/water: | N.A. |
| • Auto-Ignition temperature: | N.A. |
| • Decomposition temperature: | N.A. |
| • Viscosity: | - |
| • Explosive properties: | No |
| • Oxidizing properties: | No |

9.2 **Other information:** Not available

Section 10 - STABILITY AND REACTIVITY

- | | |
|---|--|
| • Reactivity : | Potential for exothermic hazard
May be corrosive to metals. |
| • Chemical stability : | Stable under recommended storage and handling conditions. |
| • Possibility of hazardous reactions : | The product decomposes on heating, on contact with acids under influence of light producing toxic and corrosive gases including chlorine. The product in water is a weak base. |
| • Conditions to avoid : | Heat, direct sunlight |
| • Hazardous decomposition products : | No hazardous decomposition products if stored and handled as prescribed/indicated. |
| • Incompatible materials : | Methanol, strong acids, ammonia, organics |

Section 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

- For CAS 7681-52-9 Sodium hypochlorite:
Acute toxicity oral (rat)-LD50 1100 mg/kg
Acute toxicity dermal (rabbit)- LD50 20000 mg/kg
Acute toxicity inhalation (rat)- LC50 10500 mg/m³

11.2 Irritation Corrosion:

- **Eye:** The product causes eye damage.
- **Skin:** The product found corrosive to skin.

11.3 Sensitization

- The product is not sensitizing to skin.

11.4 CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

- **Carcinogenicity** : Not classified as carcinogen.
- **Mutagenic effects** : Not classified as a mutagen.
- **Reprotoxic effects** : Not found to be reprotoxic.

11.5 Other toxic effects on humans:

- **Inhalation** : No data available
- **Dermal** : Causes severe burns
- **Eyes** : May cause eye irritation.
- **Ingestion** : No data available
- **Chronic toxicity** : No data available

11.6 NIOSH Immediately Dangerous To Life or Health Concentration (IDLH):

- No information available

11.7 Specific target organ toxicity:

- **Single exposure** : No experimental or epidemiological sufficient evidence for specific target organ toxicity
- **Repeated exposure** : No experimental or epidemiological sufficient evidence for specific target organ toxicity

Section 12 - ECOLOGICAL INFORMATION

12.1 Ecotoxicity:

- Aquatic toxicity (acute): Product contains sodium hypochlorite which is very toxic to aquatic life.

12.2 Persistence and degradability:

- Not applicable. The product is inorganic and cannot be tested for biodegradability.

12.3 Bioaccumulative potential:

- The product contains Sodium hypochlorite which reacts instantly with organic matter and every oxidizable material. Therefore no bioaccumulation testing according to Annex IX, 9.3.2. is technically feasible.

12.4 Mobility in soil:

- The product is inorganic with an infinite water solubility and very low partitioning coefficients should be considered to be mobile in soil and sediment.

12.5 Results of PBT and vPvB assessment:

- Not PBT and PVB

12.6 Other adverse effects:

- None

Section 13 - DISPOSAL CONSIDERATIONS:

- **Disposal of product** : Dilute with water. Neutralize contaminated water with a suitable solvent solution.

Recover waste water for processing later.

- **Disposal of packaging :**

Clean container with water. Recover waste water for processing later.

Section 14 - TRANSPORT INFORMATION:

Classified as dangerous in the meaning of transport regulations due to its composition.

Land transport (ADR/RID)

- **UN Number** : 1791
- **UN proper shipping name** : Hypochlorite solution
- **Transport hazard class** : 8
- **Packing group** : III

Marine transport (IMDG)

- **UN Number** : 1791
- **UN proper shipping name** : Hypochlorite solution
- **Transport hazard class** : 8
- **Packing group** : III
- **EmS number** : F-A, S-B
- **Marine pollutant** : Yes

Air transport ICAO/IATA

- **UN Number** : 1791
- **UN proper shipping name** : Hypochlorite solution
- **Transport hazard class** : 8
- **Packing group** : III

Section 15 - REGULATORY INFORMATION

15.1 Other regulatory information:

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

Control of Substances Hazardous to Health Regulations (COSHH) 2002 SI 2002/2677 and COSHH Essentials: Easy steps to control chemicals - Control of Substances Hazardous to Health Regulations HSG193.

Inventory Status:

Listed in: US(TSCA), Europe (EINECS), New Zealand (NZIoC), Philippines (PICCS), Canada(DSL), China (IECSC),Australia (AICS), Japan (ENCS).

- **HMIS (Hazardous Materials Identification system) classification:**

Health	2
Fire	1
Physical Hazard	1
Personal Protection	D

2 = Temporary or minor injury may occur.

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

1 = Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures.



- NFPA :(National Fire Protection Association)

Health	2
Fire	1
Reactivity	1

2 = Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury

1 = Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur

1= Normally stable, but can become unstable at elevated temperatures and pressures

15.2 Chemical Safety Assessment:

- A chemical safety assessment has been carried out for the substance or the mixture by the supplier (LR)- No

Section 16 – OTHER INFORMATION

16.1 Technical Advice:

- Use data given in this Safety Data Sheet and make an inventory list of all chemicals used in the factory
- Create a Register for Workplace Chemicals;
- Set priorities concerning the safety in the organization
- Create emergency plans for the assessed hazards;
- Organize occupational health care and regular surveys as necessary;
- Organize contacts with authorities/laboratories to create a monitoring system for chemical hazards, and to reliably measure and/or estimate occupational exposures to chemicals when needed;
- Start collecting case studies of accidents and sickness records in the enterprise to create a basis for priority measures in the control of hazards;
- Involve workers in safety organizations, such as the system of Safety Representatives and Committees.
- Do regular inspection using checklists made for the particular chemicals and chemical processes in use;
- Mark and label all chemicals;
- Keep at hand an inventory list of all chemicals handled in the place of work together with a collection of Chemical Safety Data Sheets for these chemicals;
- Train workers to read and understand the Chemical Safety Information, including the health hazards and routes of exposure; train them to handle dangerous chemicals and processes with respect;
- Plan, develop and choose the safe working procedures;
- Reduce the number of people coming into contact with dangerous chemicals;

- Reduce the length of time and/or frequency of exposure of workers to dangerous chemicals;
- Train workers to know and understand the emergency procedures;
- Equip and train workers to use personal protective equipment properly after everything possible has been done to eliminate hazards by means of other methods;

16.2 List of relevant R phrases:

R34- Causes burns

R50 - Very toxic to aquatic organisms

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