

Section 1 - IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product identifier

- **Product Name :** C-5

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

- **Recommended use :** CIP (ALKALI+CHLOR) cleaner.
- **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:	Acute oral toxicity	Category 4
	Skin corrosion	Category 1A
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



GHS07
Exclamation mark



GHS09
Environmental

Hazard determining components of labeling:

- **Hazard Statements :** Potassium hydroxide
Sodium hypochlorite
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.
- **Precautionary Statements:** P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
 P310 Immediately call a POISON CENTER/doctor if you feel unwell.
 P501 Dispose of contents/container to an approved waste disposal plant in accordance with local regulations.

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
Potassium hydroxide	1310-58-3	215-181-3	>=5.0 % <15.0 %	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1A; H314	H314: C ≥ 5%
Tetra potassium pyrophosphate	7320-34-5	230-785-7	>=5.0 % <15.0 %	Eye Irrit. 2; H319	None
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** : Consult a physician. Show this safety data sheet to the doctor in attendance.
- **Eye contact** : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
In the case of difficulty of opening the lids, administer an analgesic eye wash.
- **Skin Contact** : Call a physician or poison control center immediately.
Take off contaminated clothing and shoes immediately.
Wash off immediately with plenty of water.
Call a physician or poison control center immediately.
Wash contaminated clothing before re-use.
- **Inhalation** : Move to fresh air. Oxygen or artificial respiration if needed.
Call a physician immediately.
- **Ingestion** : Call a physician or poison control center immediately.
If swallowed, 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

- 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:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Suitable extinguishing media: CO₂, extinguishing powder or water jet. Fight larger fires with foam.

Unsuitable extinguishing media: Water with a full water jet.

5.2. Special hazards arising from the substance or mixture: Gives off irritating or toxic fumes in a fire.

5.3. Advice for fire-fighters

- Wear alkaline resistant protective clothing.
- 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.
- Wear corrosion proof suit
- 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
- **Skin Protection** Avoid contact with eyes by use of protective equipment. (as mentioned in section 8.2)
- **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).
- **Respiratory Protection** Wear personal protective equipment. (as mentioned in section 8.2)
- **Work Practices** Prevent further leakage or spillage if safe to do so.
Keep away from Incompatible products.
Evacuate personnel to safe areas.
Keep people away from and upwind of spill/leak.
Ventilate the area.
Wear suitable protective clothing.

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.
- Contain leaking substance, pump over in suitable containers
- Notify environmental personnel

6.3. Methods and material for containment and cleaning:

- Sweep up and shovel into suitable containers for disposal.
- Keep in properly labelled containers.

- Keep in suitable, closed containers for disposal.
- Take up liquid spill with inert absorbent material.
- Scoop absorbed substance into closing containers.
- Carefully collect spill / leftovers.
- Equipment must be corrosion resistant.
- Flush contaminated areas with large amounts of water and direct rinsings to chemical sewer or collect for treatment.
- Dispose contaminated material as per local regulation authority.

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.
- When diluting, always add the product to water. Never add water to the product.
- Keep away from incompatible products.
- Use only equipment and materials which are compatible with the product.
- To avoid thermal decomposition, do not overheat.

7.2 Conditions for safe storage:

- Store in original container.
- Store in a dry, well-ventilated place.
- Store 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:

- **Engineering measures:** Ensure adequate ventilation.
Apply technical measures to comply with the occupational exposure limits.
- **Respiratory Protection:** In the case of aerosol formation use respirator with an approved filter.
- **Hand Protection:** Impervious gloves
- **Eye Protection:** Chemical resistant goggles must be worn.
Face shield if risk on splashes.

- **Skin Protection:** Chemical resistant apron
Apron/boots of PVC, neoprene in case of dusts.
- **Protective measures :** Eye wash bottles or eye wash stations in compliance with applicable standards.
Take off contaminated clothing and shoes immediately.
Handle in accordance with good industrial hygiene and safety practice.
Dispose of rinse water in accordance with local and national regulations

Section 9 – PHYSICAL & CHEMICAL PROPERTIES:

9.1 Information on basic physical and chemical properties:

- **Appearance:** Yellowish Liquid
- **Odour:** Characteristic
- **Odour threshold:** N.A.
- **pH (2% in water):** 13.0
- **Melting point/Freezing point:** N.A.
- **Initial boiling point and boiling range:** > 100 °C
- **Flash point:** N.A.
- **Evaporation rate:** Slower than Diethyl Ether (estimated)
- **Flammability(solid/gas):** N.A.
- **Upper/lower flammability or explosive limits:** N.A.
- **Vapour pressure:** N.A.
- **Vapour density:** N.A.
- **Density(20°C):** 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:** N.A.
- **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 :** Gives off hydrogen by reaction with metals.
Exothermic reaction with strong acids.
Risk of violent reaction. Risk of explosion.
- **Conditions to avoid :** Keep away from direct sunlight.
To avoid thermal decomposition, do not overheat.

- Hazardous decomposition products :
- Incompatible materials :

Unstable on exposure to air.

Hydrogen may be hazardous decomposition products if not stored and handled as prescribed/indicated.
Heat sources, oxidizing agents, acids, highly flammable materials, halogens, organic materials

Section 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

- No data available

11.2 Irritation Corrosion:

- **Eye:** The product may cause eye damage.
- **Skin :** The product may cause skin corrosion.

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 :** No data available
- **Eyes :** No data available
- **Ingestion :** Harmful if swallowed
- **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:

- **Waste disposal methods:** Dilute with plenty of water.
Solutions with high pH-value must be neutralized before discharge.
Neutralize with acid.
In accordance with local and national regulations.
- **Contaminated packaging** Where possible recycling is preferred to disposal or incineration.
Clean container with water.
Dispose of as unused product.
In accordance with local and national regulations

Section 14 - TRANSPORT INFORMATION:

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

Land transport (ADR/RID)

- **UN Number** UN1791
- **UN proper shipping name** Hypochlorite solution
- **Transport hazard class** 8
- **Packing group** III

Marine transport (IMDG)

- **UN Number** UN1791
- **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** UN1791
- **UN proper shipping name** Hypochlorite solution
- **Transport hazard class** 8
- **Packing group** III

Section 15 - REGULATORY INFORMATION

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

EU Regulations:

- Regulation (EC) No. 1907/2006 - REACH
- Regulation (EC) No 1272/2008 – CLP
- Regulation (EC) No. 648/2004 - Detergents regulation

Ingredients according to EC Detergents Regulation 648/2004

Phosphates 5-15%

Phosphonates<5%

Chlorine-based bleaching agents<5%

15.2 Chemical Safety Assessment:

- A chemical safety assessment has not been carried out.

Section 16 – OTHER INFORMATION

Classification procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008[CLP]:

The classification of the mixture is based on calculation methods using substance data.

- **Relevant phrases:**

H290 May be corrosive to metals.

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

- **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative



Safety Data Sheet

C-5

- **Use advice:**

Normal use of this product shall imply use in accordance with the instructions on the packaging.

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