Safety Data Sheet

according to HPR, Schedule 1

1 Identification

· Product name: INO 3 Disinfectant and Sanitizer

· Article number: 2024278100

· Recommended use: Disinfectant hard surfaces

· Restrictions on use: All other uses than those indicated on the product label and technical data sheet

· Manufacturer:

Le Groupe Dissan INC.

9280, BOUL. DU GOLF, Montreal

Quebec, Canada

H1J 3A1

Phone:(514) 789-6363 Fax.:(514) 352-4815

Web site: www.inosolutions.net

· Emergency telephone number: CANUTEC 1-613-996-6666

2 Hazard identification

· Classification of the product as sold:

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

· Additional information:

This product is registered as a drug according to the Food and Drugs Act (R.S.C., 1985, c. F-27). It is not regulated under the Hazardous Products Act (R.S.C., 1985, ch. H-3). The following information is provided to our customers for their training and safety programs.

- · Label elements
- Hazard pictograms:



GHS05

· Signal word: Danger

· Hazard statements:

Causes severe skin burns and eye damage.

· Precautionary statements:

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Immediately call a POISON CENTER or a doctor.

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents and container in accordance with local, regional and national regulations.

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- · Classification system
- · NFPA ratings (scale 0 4):



Health = 2 Fire = 0 Reactivity = 0

- · Hazard not otherwise classified: None Known
- **Notes:** For the wording of the listed abbreviations refer to section 16.
- Product AT USE DILUTION: N/A

3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Aqueous mixture consisting of the following components:

| · Components: | | | | |
|---------------|---|----------|--|--|
| 68391-01-5 | Alkyl (C12-C18) Dimethyl Benzyl Ammonium Chloride | 3-7% | | |
| 85409-23-0 | Alkyl (C12, C14) Dimethyl Ethylbenzyl Ammonium Chloride | 3-7% | | |
| 64-17-5 | Ethanol | 0.5-1.5% | | |

• Additional information: Any concentration shown as a range is to protect confidentiality or is due to batch variation.

4 First aid measures

- · Description of first aid measures
- · After inhalation:

In case of unconsciousness place patient stably in side position for transportation. Get medical attention.

· After skin contact:

Remove immediately all contaminated clothing. Rinse skin with water or shower for at least 15 minutes. Consult a doctor if skin redness and irritation persist.

After eye contact:

Rinse opened eye for several minutes under running water. Remove contact lenses, if present and easy to do so. Continue rinsing for a minimum of 15 to 60 minutes. Then consult a doctor.

· After ingestion:

Drink copious amounts of water and provide fresh air. Immediately call a doctor. Do not induce vomiting.

· Most important symptoms and effects, both acute and delayed: No further relevant information available.

5 Firefighting measures

- · Suitable extinguishing media: CO2, extinguishing powder or water spray. Fight larger fires with water spray.
- Specific hazards arising from the product: During heating or in case of fire poisonous gases are produced.
- · Special protective equipment and precautions for fire-fighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

· Additional information: This product is not flammable.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures:

Mount respiratory protective device.

Wear recommended protective equipment(s). Keep unprotected persons away.

· Environmental precautions: No special measures required.

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· Methods and material for containment and cleaning up:

Surround and absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Precautions for safe handling: Ensure good ventilation at the workplace.
- Information about protection against explosions and fires: Keep respiratory protective device available.
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Conditions for safe storage, including any incompatibilities:

Keep in the original receptacle tightly sealed.

Store under lock and key and out of the reach of children.

· Specific end use(s): No further relevant information available.

8 Exposure controls/ Personal protection

· Components with limit values that require monitoring at the workplace:

64-17-5 Ethanol

EL Short-term value: 1000 ppm

EV Long-term value: 1.900 mg/m³, 1.000 ppm

- · Undiluted Product
- · Personal protective equipment:



Protective gloves (See Protection of Hands)



Safety glasses (See Eye protection)

General protective and hygienic measures:

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

Wash hands before breaks and at the end of work.

- · Breathing equipment: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product.

Protective Gloves

Check protective gloves prior to each use for their proper condition

· Eye protection:

Safety glasses are suggested when using this product in heavy use and institutional environments Wear splash-proof chemical goggles in an industrial environment.

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· Body protection:

Protective work clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. (recommended)

9 Physical and chemical properties

Form: Liquid
Colour: Colorless
Odour: Odourless
Odor threshold: Not determined
pH-Value: 6.5-8.5

· Melting point/Melting range: Not determined

· Boiling point/Boiling range: N/D

· Fusion temperature / range: Not determined

· Flash point: N/D

· Flammability (solid, gaseous): Not applicable

· Ignition temperature: N/D

· Decomposition temperature: Not determined

· **Auto igniting:** Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined. **Upper:** Not determined.

· Vapour pressure: N/D

Relative density: 0.985-1.005

Vapour density (air=1):
 Evaporation rate:
 (aqueous solution)
 Not determined

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined

· Solvent content:

VOC content: N/D

10 Stability and reactivity

- · Reactivity: Not determined.
- · Chemical stability: The product is stable.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions: No dangerous reactions known.
- · Conditions to avoid: Avoid freezing and extreme heat conditions.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products:

In case of decomposition: carbon monoxide and carbon dioxide and traces of volatile halogenated compounds.

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11 Toxicological information

- · Information on the likely routes of exposure
- · Numerical mesures of acute toxicity:

| Components Mean of exposure | | Туре | Value (Species) | | | |
|--|------------|-----------------|-----------------|--|--|--|
| ATE (Acute Toxicity Estimates) | | | | | | |
| Oral | LD50 | 5520 mg/kg | | | | |
| 68391-01-5 Alkyl (C12-C18) Dimethyl Benzyl Ammonium Chloride | | | | | | |
| Oral | LD50 | 650 mg/kg (Rat) | | | | |
| 64-17-5 Ethanol | | | | | | |
| Oral | LD50 | 7060 mg/kg (Rat | t) | | | |
| Inhalative | LC50 (4 h) | 20000 mg/L (Rat | t) | | | |

- · Symptomes related to the physical, chemical and toxiological characteristics
- If on the skin: CORROSIVE: Strong caustic effect on skin and mucous membranes.
- · If on the eye:

CORROSIVE: Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- · After ingestion: May cause irritation of the gastrointestinal tract, nausea, vomiting and headache.
- · Sensitization: No sensitizing effects known.
- · Delayed and immediate effects, and chronic effects from short-term and long-term exposure:

Prolonged or frequent contact can cause eczema and inflammation of the skins as a results of degreasing.

Carcinogenic categories:

| · IARC (International Agency for Research on Cancer) | |
|--|---|
| 64-17-5 Ethanol | 1 |
| · NTP (National Toxicology Program) | |
| None of the ingredients is listed. | |

12 Ecological information

- · Bioaccumulative potential: No further relevant information available.
- · Mobility in soil: Not determined
- · Ecotoxicity: No relevant information available.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods recommendation:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with local authority requirements.

Dispose in accordance with all applicable federal, state, provincial and local laws and regulations. Contact your local, state, provincial or Federal environmental agency for specific rules.

· Uncleaned packagings recommendation:

Do not re-use empty containers.

Dispose of packaging according to regulations on the disposal of packagings.

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· Recommended cleansing agent:

Water

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 Transport information

- · UN-Number
- \cdot **DOT**, **IMDG**, **IATA** UN1903
- · UN proper shipping name

· **DOT+TDG** Disinfectant, liquid, corrosive, n.o.s. (Quaternary Ammonium Compound, Quaternary Ammonium

Compound)

· IMDG, IATA DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Composés d'ammonium quaternaire, Quaternary

Ammonium Compound)

- · Transport hazard class(es)
- · DOT, IMDG, IATA
- Class 8 Corrosive substances
- · Packing group
- · DOT, IMDG, IATA III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Canadian substance listings

| · Canadian Domestic Substances List (DSL) | | | | |
|---|---|--|--|--|
| 68391-01-5 | Alkyl (C12-C18) Dimethyl Benzyl Ammonium Chloride | | | |
| 64-17-5 | Ethanol | | | |
| 7732-18-5 | water, distilled, conductivity or of similar purity | | | |
| Connedian In | Consider Ingredient Disclosure list (limit 0.40/) | | | |

Canadian Ingredient Disclosure list (limit 0.1%)

64-17-5 Ethanol

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

Department issuing SDS:

Prepared by:

Regulatory Affairs Department

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

NFPA: National Fire Protection Association (USA) VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent