

1. Material and Company Identification

Product Name DP-O
 Product Code
 Company Name Techno Chem Corporation
 Address 1-34 Shimo-cho, Omiya-ku, Saitama, Saitama 330-0844
 Phone Number +81-48-795-8372
 Emergency Phone Number +81-48-795-8372
 Uses Industrial supplies (metal mold cleaner)
 Creation Date 11/17/2004
 Revision Date 10/1/2009



2. Hazards Identification



Signal Words **DANGER!**
 Hazard Information Extremely combustible, highly flammable aerosol
 Highly flammable liquid and vapor
 May be harmful if swallowed
 May be harmful if contacting skin
 Severely irritating to eyes
 Suspected to adversely affect fertility and fetuses
 Organ failure (central nervous system, kidneys, systemic toxicity)
 May irritate respiratory system
 May cause drowsiness or dizziness
 Prolonged or repeated exposure may cause organ failure (blood vessels, liver, pancreas)
 May be harmful if swallowed and enters airways

3. Information on Composition / Ingredients

Single component or mixture: Mixture

Chemical Name	Content (wt%)	CAS.No.
Isopropyl alcohol	60-70	67-63-0
Propane	—	74-98-6
n-Butane	5-10	106-97-8
Isobutane	2-5	75-28-5

* Other ingredients are trade secrets

4. First Aid Measures

Eye:	Immediately flush eyes carefully with clean running water for several minutes. If wearing contacts, remove and clean them. If eye irritation persists, consult a physician.
Skin:	Flush the contacted skin immediately. Remove all contaminated clothing and wash before reuse. If there are any abnormalities, consult a physician.
Inhalation:	Move to a location with fresh air and rest in position comfortable for breathing. If experiencing any discomfort or difficulty breathing, consult a physician immediately.
Ingestion:	Rinse mouth immediately. If there are any abnormalities, consult a physician.

5. Fire Fighting Measures

Fire Fighting Procedure:	<p>Spray or spread dry chemical, carbon dioxide or other extinguishing agent on the fire source to extinguish the fire. Using a foam extinguishing agent to cut off air is also effective.</p> <p>This is an aerosol product and can explode. Maintain adequate distance and extinguish upwind from the fire.</p> <p>Cool products exposed to high temperatures with water. Leaving products immersed in water can cause them to rust and explode, so remove quickly after cooling.</p>
Extinguishing Media:	Dry chemical, carbon dioxide or foam

6. Accidental Release Measures

Personal precautions, protective equipment and emergency measures:	Be careful that aerosol spray does not drift onto the body or into eyes. Ventilate well if using indoors. Wear gloves, a protective mask, goggles and other protective equipment when working, and be careful not to inhale any gases or vapors.
Environmental precautions:	Take care not to damage the environment by discharging into rivers or other bodies of water.
Containment and clean-up procedures/equipment:	Stop leaks if not dangerous to do so. Ground all equipment when handling spilled material.
Secondary disaster prevention:	Remove all ignition sources immediately. Prevent inflow into drainage, sewerage or closed locations.

7. Handling and Storage

Handling:	<p>Do not use near fire or flames.</p> <p>Do not use in large quantities indoors when flames are in use.</p> <p>Do not expose to fire.</p> <p>Discard when can is used up.</p> <p>Follow all other specified product usage and precaution notes (using outdoors, etc.).</p>
Storage	<p>Cans are at risk of rupturing if exposed to high temperatures. Do not leave in temperatures of 40°C or greater, such as under direct sunlight or near fire.</p> <p>Do not leave around water or in damp places.</p> <p>Do not leave within the reach of children.</p>

8. Exposure Controls / Personal Protection

Controlled concentrations:	Isopropyl alcohol: 200 ppm
Allowable concentrations:	
Japan Society for Occupational Health	Isopropyl alcohol: 400 ppm n-Butane: 500 ppm
ACGIH	Isopropyl alcohol: 200 ppm (TLV-TWA), 400 ppm (TLV-STEL) n-Butane: 800 ppm Propane: 1,000 ppm
Equipment measures:	When using in large quantity in indoor workplaces, install an explosion proof exhaust system to prevent vapor from accumulating. (Indoor use of this product prohibited.)
Protective equipment:	Respiratory protection (organic gas mask)
Protective eyewear:	Goggles
Protective gloves:	Rubber gloves
Protective clothing:	With static protection

9. Physical and Chemical Properties

Appearance:	Pale yellow transparent liquid (undiluted)
Odor:	No data
pH:	No data
Melting point, freezing point:	No data
Boiling point, initial boiling point and boiling range:	No data
Flash point:	11.7°C (Isopropyl alcohol)
Explosive range:	Lower limit, 1.8% (propellant: butane) Upper limit, 9.5% (propellant: propane)
Vapor pressure:	0.29MPa (25°C)
Vapor density (atmosphere = 1):	No data
Specific gravity:	0.854 (undiluted)
Solubility in water:	No data
N-octanol-water partition coefficient:	No data
Spontaneous ignition temperature:	No data
Decomposition temperature:	No data

10. Stability and Reactivity

Chemical stability:	No data
Chemical reactivity:	Oxidation: none
Conditions to avoid:	Exposure to high temperatures
Incompatibility:	Avoid bringing in contact with acids and alkalis, as they could corrode the container.

11. Toxicological Information

Acute toxicity:	Oral: Category 5 (value: 3437) Dermal: Category 5 (value: 4059) Inhalation (gas): not classified (value: 106667) Inhalation (vapor): no data Inhalation (mist): no data
Skin corrosion/irritation: Serious eye damage/eye irritation:	No data Category 2A (61.1% comprised of category 2A substances)
Respiratory and skin sensitization:	Respiratory sensitization: no data Skin sensitization: no data
Germ cell mutagenicity: Carcinogenicity:	No data No data
Reproductive toxicity:	Category 2 (61.1% comprised of category 2 substances)
Specific target organ/systemic toxicity (single exposure):	Central nervous system, kidneys, systemic toxicity: Category 1 (61.1% comprised of category 1 substances) Respiratory tract irritation, anesthetic action: Category 3 (70.7% comprised of category 3 substances)
Specific target organ/systemic toxicity (repeated exposure):	Blood vessels, liver, pancreas: Category 2 (61.1% comprised of category 2 substances)
Aspiration toxicity:	Category 2 (61.1% comprised of category 2 substances)

12. Ecological Information

Acute aquatic environmental toxicity:	No data
Chronic aquatic environmental toxicity:	No data
Persistence/biodegradability:	No data
Bioaccumulation potential:	No data
Mobility in soil:	No data

13. Disposal Considerations

Residual waste:	Small amounts: Go outdoors with no surrounding fires, press button until spraying noise stops and gas is emptied, and then dispose. Large amounts: Contract with a licensed waste disposal company for waste disposal
Container and packaging:	Separate and dispose of according to the rules established by your municipality

14. Transport Information

UN number:	1950
Class:	2.1
International regulations:	Maritime regulatory information: according to IMO regulations Aviation regulatory information: according to ICAO/IATA regulations
National regulations:	Land transport regulatory information: according to Fire Service Act and High Pressure Gas Safety Act Maritime regulatory information: according to Ship Safety Act Aviation regulatory information: according to Civil Aeronautics Act

15. Regulatory Information

High Pressure Gas Safety Act:	Aerosol
Fire Service Act:	Category IV, Class 1 petroleum; Hazard class II (As an LPG, must report stored amounts exceeding 300 Kg)
PRTR Act:	n/a
Industrial Safety and Health Act:	Toxic substance to be noted Hazardous material, flammable material
Ship Safety Act:	Hazardous material (high pressure gas)
Civil Aeronautics Act:	High pressure gas

16. Other Information

References:	Japan Advanced Information Center of Safety and Health, MSDS exhibit (Isopropyl alcohol, propane, n-Butane) GHS classification results, National Institute of Technology and Evaluation (Isopropyl alcohol, propane, n-Butane) MSDS for other materials
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This data sheet is the latest information collected on safely handling this product under general circumstances, but is not perfect. It may be added to or revised if new information becomes available. Evaluate the safety before mixing this product with other products or using under special conditions. Values in this data sheet are not guaranteed.