

Material Safety Data Sheet



Revision Date 01-Feb-2006

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product code DA6152
Product name Open & Shut
Recommended Use Solvent
Supplier Drummond American Corporation
600 Corporate Woods Parkway
Vernon Hills, IL 60061
(847) 913-9313
Emergency telephone number (888) 426-4851

2. HAZARDS IDENTIFICATION

Emergency Overview

Irritant. May be harmful if swallowed. Harmful by inhalation.

Color Colorless

Odor Slight

Form Aerosol

Aggravated Medical Conditions None Known.
Principal Routes of Exposure Inhalation. Eyes. Skin contact.
Potential health effects

Eyes Irritation. Redness. Itching. Burning sensation.
Skin Repeated or prolonged exposure may cause: Skin Irritation. Redness. Itching. Burning sensation.
Inhalation Repeated or prolonged exposure may cause the following effects. Headaches. Dizziness. Nausea. Upper respiratory tract irritation. Central nervous system effects. Loss of coordination.
Ingestion May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Carbon Dioxide	124-38-9	1-5
Petroleum distillates, hydrotreated heavy naphthenic	64742-52-5	10-30
Tetrachloroethylene	127-18-4	60-100

4. FIRST AID MEASURES

Eye contact	Flush with plenty of water for at least 15 minutes. Seek medical attention.
Skin contact	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use.
Ingestion	Do not induce vomiting. Immediate medical attention is required.
Inhalation	Remove from exposure. Restore breathing. Keep warm and quiet. Contact physician if breathing difficulty develops.

5. FIRE FIGHTING MEASURES

Flash point °C	> 93
Flash point °F	> 200
Method	Pensky-Martens C.C.

Autoignition temperature °C	No data available
Autoignition temperature °F	No data available

Flammability Limits (% in Air)

Upper	Not Applicable
Lower	Not Applicable

Specific Information for Aerosol Products

Suitable extinguishing media

Carbon dioxide (CO₂). Dry chemical. Foam.

Special protective equipment for firefighters

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

Special Fire-Fighting Procedures

Avoid breathing of vapors. Avoid skin and eye contact.

Specific hazards

Keep product and empty container away from heat and sources of ignition In the event of fire and/or explosion do not breathe fumes

Fire and Explosion Hazards

During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention. Firefighters should wear NIOSH/MSHA approved (or equivalent) self-contained pressure-demand breathing apparatus and full protective clothing. Water should be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat . Water spray may be ineffective. If water is used, fog nozzles are preferable.

Sensitivity to shock

No information available.

Sensitivity to static discharge

No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment.

Methods for cleaning up

Eliminate all sources of ignition. Ventilate area to maintain exposure below permissible exposure limits. Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Handling

Contents under pressure. Do not puncture or incinerate. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep in a well-ventilated place. Keep out of reach of children.

Storage

Store in temperatures below 120 degrees F.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

Chemical Name	OSHA PEL (TWA)	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Tetrachloroethylene	100 ppm	200 ppm	25 ppm	100 ppm
Petroleum distillates, hydrotreated heavy naphthenic	-	-	-	-
Carbon Dioxide	5000 ppm exposures < 10,000 ppm to be cited de minimus 9000 mg/m ³	-	5000 ppm	30000 ppm

Ventilation and Environmental Controls

Use enough ventilation, local exhaust at the work area, or both, to keep below the TLV's in the worker's breathing zone and the general area. General: as necessary.

Hygiene measures

Wash hands before breaks and immediately after handling the product.

Other precautions

Avoid contact with the skin and the eyes Avoid breathing vapors or mists

Personal protective equipment**Respiratory protection**

If the exposure limits are exceeded, a NIOSH/MSHA approved respirator is recommended. Wear a NIOSH approved organic vapor/particulate respirator.

Hand Protection

Gloves are not required in normal use. For prolonged or repeated skin contact, use a chemically resistant glove such as nitrile or neoprene. Wash hands with soap and water after removing gloves. Dry hands thoroughly before re-applying gloves. .

Eye protection

Wear safety glasses with side shields.

Skin and body protection

None necessary under normal conditions

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Aerosol	Color	Colorless
Odor	Slight	Odor Threshold	No information available
pH	Not Applicable	Specific Gravity	1.37
Vapor pressure	No data available	Vapor density	>1 (air=1)
Evaporation Rate	>1 (ether = 1)	VOC Content	0 %
Water solubility	No data available	Partition Coefficient (n-octanol/water)	No data available
Boiling point/range °C	-18 - 122	Boiling point/range °F	0 - 252
Melting point/range °C	Not Applicable	Melting point/range °F	Not Applicable
Flash point °C	> 93	Flash point °F	> 200

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

None known.

Incompatibility

None known .

Hazardous Decomposition Products

Carbon dioxide. Carbon monoxide. Hydrogen chloride.

Polymerization

Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Component Information

Chemical Name	LD50 (oral, rat)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat)
<i>Tetrachloroethylene</i> 127-18-4	2629 mg/kg	-	5200 mg/kg

<i>Petroleum distillates, hydrotreated heavy naphthenic</i> 64742-52-5	5000 mg/kg	2000 mg/kg	2.18 mg/L
<i>Carbon Dioxide</i> 124-38-9	-	-	836 ppm

Synergistic Products

None known

Potential health effects**Sensitization**

None known .

Mutagenic effects

None known .

Reproductive toxicity

None known .

Carcinogenic effects

See table below

Chronic toxicity

See Section 2 .

Teratogenic effects

None known .

Target Organ Effects

None Known.

Chemical Name	ACGIH OEL - Carcinogens	IARC	NTP - Known Carcinogens	NTP - Suspected Human Carcinogens	OSHA RTK Carcinogens
Tetrachloroethylene	A3 - Confirmed animal carcinogen with unknown relevance to humans	Group 2A	Not Listed	Listed	Listed
Petroleum distillates, hydrotreated heavy naphthenic	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Carbon Dioxide	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATION

Tetrachloroethylene

Microtox Data*Photobacterium phosphoreum* EC50=120.0 mg/L (30 min)

13. DISPOSAL CONSIDERATIONS

Disposal Information

This product contains tetrachloroethylene, a highly volatile solvent which is a toxic waste as defined by RCRA ,40 CFR 261 (United States) . In normal use this chemical will quickly evaporate.However, grease or other residue removed by this product may contain sufficient tetrachloroethylene to be classified as a toxic waste. Do not puncture or incinerate. Depressurize before disposal.

Waste from residues / unused products

Dispose in accordance with federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT

Consumer commodity (Tetrachloroethylene, Carbon Dioxide),ORM-D

TDG

AEROSOLS(Tetrachloroethylene,Carbon Dioxide), Class 2.2,UN1950

IMDG/IMO

Aerosols(Tetrachloroethylene,Carbon Dioxide),Class 2.2, UN1950

IATA

UN1950 Aerosols, non-flammable(Tetrachloroethylene,Carbon Dioxide), Class 2.2

MEX

UN1950 Aerosols(Tetrachloroethylene,Carbon Dioxide),2.2,

15. REGULATORY INFORMATION

Chemical Name	US EPA SARA 313 Emission Reporting
Tetrachloroethylene	Listed

Chemical Name	New Jersey - RTK	Pennsylvania - RTK	California Prop. 65
Tetrachloroethylene	Listed	Listed	Carcinogen
Petroleum distillates, hydrotreated heavy naphthenic	Not Listed	Not Listed	Not Listed
Carbon Dioxide	Listed	Listed	Not Listed

Chemical Name	EINECS	DSL	NDSL	TSCA
Tetrachloroethylene	X	X	-	X
Petroleum distillates, hydrotreated heavy naphthenic	X	X	-	X
Carbon Dioxide	X	X	-	X

CPRC

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all of the information required by the Controlled Product Regulations

16. OTHER INFORMATION

NFPA		HMIS	
Health	-	Health	2
Flammability	-	Flammability	1
Reactivity	-	Physical Hazard	0

Prepared By

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The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.