

Issue date 28-Mar-2018

Revision date 10-Mar-2020

Revision Number 6

1. IDENTIFICATION

Product identification

Product identifier	Drummond™ Open and Shut - Nut and Bolt Loosener and Rust Penetrant
Other means of identification	DA6152
Recommended use	Penetrant
Restrictions on use	For industrial use only

Supplier

Corporate Headquarters:
 Drummond™, A Lawson Brand
 Lawson Products, Inc.
 8870 W. Bryn Mawr Ave., Suite 900
 Chicago, IL 60631
 (866) 837-9908

Canadian Distribution Center:
 Lawson Canada
 7315 Rapistan Court
 Mississauga, ON L5N 5Z4
 (800) 323-5922

24 Hour Emergency Phone Number 1-(888) 426-4851

Website <https://www.lawsonproducts.com>

2. HAZARD(S) IDENTIFICATION

Hazard Classification This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), WHMIS 2015 and GHS Regulations.

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 2
Gases under pressure	Dissolved gas

Symbol



Signal word DANGER

Hazard statements
 H280 - Contains gas under pressure; may explode if heated
 H315 + H320 - Causes skin and eye irritation
 H350 - May cause cancer
 H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary statements

General	P101 - If medical advice is needed, have product container or label at hand P102 - Keep out of reach of children P103 - Read label before use.
Prevention	P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P280 - Wear protective gloves/protective clothing and eye/face protection P264 - Wash hands thoroughly after handling P260 - Do not breathe dusts or mists
Response	
General	P308 + P313 - IF exposed or concerned: Get medical advice/attention P314 - Get medical advice/attention if you feel unwell.
Eyes	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337 + P313 - If eye irritation persists: Get medical advice/attention
Skin	P302 + P352 - IF ON SKIN: Wash with plenty of soap and water P362 - Take off contaminated clothing and wash before reuse P332 + P313 - If skin irritation occurs: Get medical advice/attention
Storage	P405 - Store locked up P410 + P403 - Protect from sunlight. Store in a well-ventilated place
Disposal	P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable
Hazard(s) Not Otherwise Classified (HNOC)	None known.
Physical Hazards Not Otherwise Classified (PHNOC)	None known.
Unknown acute toxicity	0%.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition Mixture.

Chemical name	CAS-No	Weight %
Tetrachloroethylene	127-18-4	75-90
Naphthenic Oil, Severely Hydrotreated	64742-52-5	10-15
Carbon Dioxide	124-38-9	<3
Carbon tetrachloride	56-23-5	<1

4. FIRST-AID MEASURES

Necessary first-aid measures

Inhalation Remove to fresh air. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If breathing is difficult, give oxygen. If not breathing, administer artificial respiration by trained personnel. Get medical

	attention if symptoms occur.
Ingestion	Not a likely route of exposure.
Skin contact	Wipe off with a towel. Wash off immediately with soap and plenty of water. Seek medical attention if irritation persists.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lift eyelids occasionally. Get prompt medical attention.
Most important symptoms (acute)	Not available.
Most important symptoms (over-exposure)	Repeated exposure may cause skin dryness or cracking. May cause drowsiness or dizziness.
Indication of any immediate medical attention and special treatment needed	None known.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Dry Chemical, Carbon Dioxide, Foam or Water Fog.
Unsuitable extinguishing media	None known.
Specific hazards	Closed containers can explode due to buildup of pressure when exposed to extreme heat. Liquid content will not support combustion. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention. Hazardous decomposition products. Carbon monoxide. Carbon dioxide. Halogenated compounds. carbonyl halides.
Special protective equipment for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Containers should be cooled with water to prevent vapor pressure build up. Cool containers exposed to flames with water until well after the fire is out. Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering the area. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in the hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information for 'non-emergency personnel'. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containment and cleaning up	Small Spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry in sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Use spark-proof tools and explosion proof equipment. See section 1 for emergency contact information and section 13 for disposal information.

7. HANDLING AND STORAGE

Precautions for safe handling

Put on appropriate personal protective equipment (see section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid contact during pregnancy/while nursing. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Do not take internally. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store away from direct sunlight in dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all sources of ignition. Use appropriate containment to avoid environmental contamination. See section 10 for incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
Tetrachloroethylene	100 ppm TWA	25 ppm TWA	-
Naphthenic Oil, Severely Hydrotreated	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA
Carbon Dioxide	5000 ppm TWA 9000 mg/m ³ TWA	5000 ppm TWA	5000 ppm TWA 9000 mg/m ³ TWA
Carbon tetrachloride	10 ppm TWA	5 ppm TWA Skin	-

Appropriate engineering controls

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures, such as personal protective equipment

Eye protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin and body protection

Chemical-resistant, impervious gloves (Nitrile or Viton) complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use the the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Canadian Province Occupational Exposure Limits

Chemical name	AB	BC	MB	NB	NL	NS	ON	PE	QC	SK
Tetrachloroethylene	25 ppm TWA 170 mg/m ³ TWA	25 ppm TWA	25 ppm TWA	25 ppm TWA 170 mg/m ³ TWA	25 ppm TWA	25 ppm TWA	25 ppm TWA	25 ppm TWA	25 ppm TWA 170 mg/m ³ TWA	25 ppm TWA
Naphthenic Oil, Severely Hydrotreated	5 mg/m ³ TWA	0.2 mg/m ³ TWA 1 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA	5 mg/m ³ TWA
Carbon Dioxide	5000 ppm TWA 9000 mg/m ³ TWA	5000 ppm TWA	5000 ppm TWA	5000 ppm TWA 9000 mg/m ³ TWA	5000 ppm TWA	5000 ppm TWA	5000 ppm TWA	5000 ppm TWA	5000 ppm TWA 9000 mg/m ³ TWA	5000 ppm TWA
Carbon tetrachloride	5 ppm TWA 31 mg/m ³ TWA	2 ppm TWA	5 ppm TWA	5 ppm TWA 31 mg/m ³ TWA	5 ppm TWA	5 ppm TWA	2 ppm TWA	5 ppm TWA	5 ppm TWA 31 mg/m ³ TWA	-

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Aerosol
Color	Colorless
Odor	Chlorinated solvents
Odor threshold	Not available
pH	Not applicable
Melting point/range °C	Not available
Melting point/range °F	Not available

Boiling point/range °C	Not available
Boiling point/range °F	Not available
Flash point °C / °F	Not available
Evaporation rate	2.59 (Butyl Acetate = 1)
Flammability (Solid, Gas)	Not available
Lower explosion limit	Not available
Upper explosion limit	Not available
Vapor pressure	101.3 kPa (760 mm Hg) [at 20°C]
Vapor density	5.83(Air=1)
Relative density	1.39
Solubility	Not available
Partition coefficient (n-octanol/water)	Not available
Autoignition temperature °C	Not available
Autoignition temperature °F	Not available
Decomposition temperature °C	Not available
Decomposition temperature °F	Not available
Viscosity	Kinematic (40°C (104°F)): <0.205 cm ² /s (<20.5 cSt)

10. STABILITY AND REACTIVITY

Reactivity	Not available.
Chemical stability	Stable under normal storage conditions.
Possibility of hazardous reactions	Not available.
Conditions to avoid	Not available.
Incompatible materials	Acids. Strong oxidizing agents. Oxygen. Peroxides. Reactive metals. Aluminum.
Hazardous decomposition products	Hydrogen chloride. Phosgene. Chlorine. Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	Dermal. Inhalation. Eyes. Ingestion.
Symptoms	Causes eye and skin irritation. Inhalation can cause central nervous system (CNS) depression. May cause dizziness and drowsiness. May cause respiratory irritation. Ingestion can cause central nervous system (CNS) depression.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

May cause damage to organs through prolonged or repeated exposure. May cause cancer. Risk of cancer depends on duration and level of exposure. Adverse symptoms may include the following: eye pain, redness, and watering. Causes respiratory tract irritation. Coughing. Nausea. Headache. May cause drowsiness and dizziness. Unconsciousness. Prolonged skin contact may cause skin irritation. redness.

Numerical measures of toxicity

Chemical name	Inhalation LC50:	Dermal LD50:	Oral LD50:
Tetrachloroethylene	27.8 mg/L Rat	= 2629 mg/kg Rat	2629 mg/kg Rat
Naphthenic Oil, Severely Hydrotreated	2062 ppm Rat	> 5000 mg/kg Rat = 22 g/kg Mouse > 24 g/kg Rat >2000 mg/kg Rabbit	>5000 mg/kg Rat >24 g/kg Rat > 2000 mg/kg Rabbit
Carbon Dioxide	-	-	-
Carbon tetrachloride	8000 ppm Rat	= 2350 mg/kg Rat 5070 mg/kg Rat	2350 mg/kg Rat = 5070 mg/kg Rat

ATEmix (dermal)	Not available
ATEmix (oral)	3281.6 mg/kg
ATEmix (inhalation-gas)	Not available
ATEmix (inhalation-vapor)	Not available
ATEmix (inhalation-dust/mist)	Not available

Carcinogenicity

Chemical name	ACGIH OEL - Carcinogens	IARC	OSHA Carcinogens	NTP
Tetrachloroethylene	A3	Group 2A	Present	Reasonably Anticipated Carcinogen
Naphthenic Oil, Severely Hydrotreated	A4 A2	Group 1	Present	Known carcinogen
Carbon Dioxide	-	-	-	-
Carbon tetrachloride	A2	Group 2A Group 2B	Present	Reasonably Anticipated Carcinogen

Canadian Province carcinogenicity limits

Chemical name	Alberta - Carcinogen	British Columbia - Carcinogen	Manitoba - Carcinogen	New Brunswick - Carcinogen	Nova Scotia - Carcinogen	Quebec - Carcinogen
Tetrachloroethylene	-	IARC 2A	ACGIH A3	ACGIH A3	ACGIH A3	C3 Carcinogen
Naphthenic Oil, Severely Hydrotreated	-	IARC 1	ACGIH A2 ACGIH A4	-	ACGIH A2 ACGIH A4	-
Carbon Dioxide	-	-	-	-	-	-
Carbon tetrachloride	A2 - Suspected Human Carcinogen	ACGIH A2 IARC 2B	ACGIH A2	ACGIH A2	ACGIH A2	C2 carcinogen

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish LC50
Tetrachloroethylene	>500mg/L Pseudokirchneriella subcapitata 96h	11.0 - 15.0mg/L Lepomis macrochirus 96h 12.4 - 14.4mg/L Pimephales promelas 96h 4.73 - 5.27mg/L Oncorhynchus mykiss 96h 8.6 - 13.5mg/L Pimephales promelas 96h
Naphthenic Oil, Severely Hydrotreated	-	> 5000mg/L Oncorhynchus mykiss 96h
Carbon Dioxide	-	-
Carbon tetrachloride	=830mg/L Tetrahymena pyriformis 24h	23 - 33mg/L Lepomis macrochirus 96h 36.3 - 47.3mg/L Pimephales promelas 96h 9.68 - 11.3mg/L Pimephales promelas 96h

Persistence and degradability Not available.

Bioaccumulation Does not bioaccumulate

Chemical name	CAS-No	Partition coefficient (log Kow)	Bioconcentration factor (BCF)
Tetrachloroethylene 127-18-4	127-18-4	2.53 - 2.88 at 20 °C	25.8 - 77.1 BCF method: OECD 305C
Naphthenic Oil, Severely Hydrotreated 64742-52-5	64742-52-5	-	-
Carbon Dioxide 124-38-9	124-38-9	-	no bioaccumulation
Carbon tetrachloride 56-23-5	56-23-5	2.75 at 23 °C	17.7 - 30 species: fish

Mobility in soil Not available.

Other adverse effects Not available

13. DISPOSAL CONSIDERATIONS

Disposal information Dispose of all product, residues and clean-up materials in accordance with local, state, and federal regulations.

Contaminated packaging Personnel should wear appropriate protective equipment. Follow all precautions for handling. Please refer to appropriate sections of MSDS for additional information.

14. TRANSPORTATION INFORMATION

Shipping Descriptions

DOT

ID-No UN1950
Proper shipping name Aerosols
Hazard Class(es) 2.2
Subsidiary Risk
Special Provisions LTD QTY

TDG

ID-No UN1950
Proper shipping name Aerosols

Hazard Class(es) 2.2
Special Provisions LTD QTY

IATA

ID-No UN1950
Proper shipping name Aerosols, non-flammable
Hazard Class(es) 2.2
Special Provisions LTD QTY

IMDG/IMO

ID-No UN1950
Proper shipping name Aerosols
Hazard Class(es) 2.2
Special Provisions LTD QTY

Marine Pollutants

Chemical name	CAS-No	USDOT Marine Pollutant	Canada TDG Marine Pollutant	IMDG Marine Pollutant
Tetrachloroethylene	127-18-4	X	X	X
Naphthenic Oil, Severely Hydrotreated	64742-52-5	-	-	-
Carbon Dioxide	124-38-9	-	-	-
Carbon tetrachloride	56-23-5	X	X	X

Special Precautions

Multi-modal shipping descriptions are provided for informational purposes and do not consider container size. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

15. REGULATORY INFORMATION

State regulations

U.S. state Right-to-Know regulations

Chemical name	CAS-No	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK
Tetrachloroethylene	127-18-4	X	X	X
Naphthenic Oil, Severely Hydrotreated	64742-52-5	X	X	X
Carbon Dioxide	124-38-9	X	X	X
Carbon tetrachloride	56-23-5	X	X	X

California Prop. 65

WARNING: This product contains a chemical(s) known to the state of California to cause cancer

Chemical name	CAS-No	California Prop. 65
Tetrachloroethylene	127-18-4	Carcinogen
Naphthenic Oil, Severely Hydrotreated	64742-52-5	-
Carbon Dioxide	124-38-9	-
Carbon tetrachloride	56-23-5	Carcinogen

U.S. Federal Regulations

US EPA SARA 313

Chemical name	CAS-No	CERCLA/SARA Hazardous Substances RQ	SARA 313 - Threshold Values
Tetrachloroethylene	127-18-4	100 lb 45.4 kg 1 lb 0.454 kg	0.1 %
Naphthenic Oil, Severely Hydrotreated	64742-52-5	-	-
Carbon Dioxide	124-38-9	-	-
Carbon tetrachloride	56-23-5	10 lb 4.54 kg 1 lb 0.454 kg	0.1 %

US EPA SARA 311/312 Acute Health Hazard
hazardous categorization Chronic Health Hazard

TSCA and Canadian Inventories

Chemical name	Inventory - United States - Section 8(b) Inventory (TSCA)	U.S. - TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification	DSL	NDSL
Tetrachloroethylene	X	-	X	-
Naphthenic Oil, Severely Hydrotreated	X	-	X	-
Carbon Dioxide	X	-	X	-
Carbon tetrachloride	X	-	X	-

Legend X - Listed

16. OTHER INFORMATION

NFPA

Health Not available
Flammability Not available
Instability Not available

HMIS

Health 2
Flammability 0
Physical hazards 3

Notice: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA).

Prepared by Regulatory Affairs

Issue date 18-May-2018

Revision date 10-Mar-2020

Revision note

Key to abbreviations

ACGIH (American Conference of Governmental Industrial Hygienists)
ATE (Average Toxicity Estimate)
DSL/NDSL (Domestic Substance List/Non-Domestic Substance List)
HMIS (Hazardous Materials Identification System)
IARC (International Agency for Research on Cancer)
IATA (International Air Transport Association)
IMDG/IMO (International Maritime Dangerous Goods/International Maritime Organization)
NFPA (National Fire Protection Association)
NTP (National Toxicology Program)
OEL (Occupational Exposure Level)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
TSCA (Toxic Substance Control Act)
USEPA (United States Environmental Protection Agency)

Disclaimer

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.

End of Safety Data Sheet