



Material Safety Data Sheet

Preparation Date: 21-May-2005

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Revision Number: 1

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Supplier(s):

Orica Canada Inc.
Maple Street
Brownsburg, QC
For MSDS Requests: 1-450-533-4201

Orica USA Inc.
33101 E. Quincy Avenue
Watkins, CO 80137-9406
For MSDS Requests: 1 303-268-5000

Product Name:

B-line™, Boostercord™, Cordtex™, Powercord™, Primaflex™

Product Code:

40040

Alternate Name(s):

Uniline, B-Line, Trunkline, Powercord 100, Powercord 150, Powercord 200, Powercord O 200, Boostercord, Primaflex, Anoline, X-245, X-247, Cordtex 7.5, Cordtex SHD, Cordtex 15, Cordtex LT, Cordtex AP, Cordtex 18, Cordtex 25, Cordtex Premium, Cordtex 40, Cordtex TL, Cordtex 50, Cordtex XTL, Cordtex 60, T-line, Special, 4400 M/S, Poly, Lo Flash 25, Lo Flash 60, Lo Flash 78, Lo Flash 108

UN-No:

UN0065

Recommended Use:

Used for initiation of explosive mixtures.

Emergency Telephone Number: FOR CHEMICAL EMERGENCIES (24 HOUR) INVOLVING TRANSPORTATION, SPILL, LEAK, RELEASE, FIRE OR ACCIDENTS: **IN CANADA CALL:** THE ORICA TRANSPORTATION EMERGENCY RESPONSE SYSTEM AT **1-877-561-3636. IN THE U.S. CALL: CHEMTREC 1-800-424-9300. IN THE U.S.:** FOR LOST, STOLEN, OR MISPLACED EXPLOSIVES CALL: BATF **1-800-800-3855.** FORM ATF F 5400.0 MUST BE COMPLETED AND LOCAL AUTHORITIES (STATE/MUNICIPAL POLICE, ETC.) MUST BE ADVISED.

SECTION 2 – HAZARD IDENTIFICATION

Emergency Overview:

Danger. Risk of explosion by shock, fire or other sources of ignition. Irritating to eyes, respiratory system and skin.

Appearance:

Cords covered with PVC or polyethylene plastic and/ or wax textiles

Physical State:

Solid

Odor:

Odorless

SECTION 3 – COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical Name

Pentaerythritol Tetranitrate (PETN)

CAS-No

78-11-5

Weight %

60-100

SECTION 4 – FIRST AID MEASURES

General Advice:

Not applicable; this is a packaged product that will not result in exposure to the contents under normal conditions of use. In the event of contact, administer first aid appropriate for symptoms present.

Eye Contact:

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Immediate medical attention is required.

Skin Contact:

Wash off immediately with soap and plenty of water, removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Inhalation:

Move victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is not breathing AND no pulse. Obtain medical advice IMMEDIATELY.

Ingestion:

Immediate medical attention is required. Do not induce vomiting. Clean mouth with water and afterwards drink plenty of water. If spontaneous vomiting occurs, have victim lean forward with head positioned to avoid breathing in of vomitus, rinse mouth and administer more water. Never give anything by mouth to and unconscious person.

Notes to physician: Symptomatic. Administer oxygen if there are signs of cyanosis. If clinical condition deteriorates, administer 10cc Methylene Blue intravenously. It is unlikely for this to be required with methemoglobin level of less than 40%.

SECTION 5 – FIRE-FIGHTING MEASURES

Flammable properties: Product burns if ignited, with possible transition to detonation. May ignite or explode if heated under confinement.

Suitable extinguishing media: DO NOT FIGHT FIRES INVOLVING EXPLOSIVES. Evacuate surrounding areas. When controlling fire before involvement of explosives, fire-fighters should wear positive pressure self-containing breathing apparatus (SCBA) and full turnout gear. Water may be applied through fixed extinguishing system (sprinklers) as long as people need not be present for the system to operate.

Unsuitable extinguishing media: DO NOT FIGHT FIRES INVOLVING EXPLOSIVES. Attempts to smother a fire involving this product will be ineffective as it is its own oxygen source. Smother this product could lead to decomposition and explosion. This product is more sensitive to detonation if contaminated with organic or oxidisable material or if heated while confined. Unless the mass of product on fire is flooded with water, re-ignition is possible.

Specific hazards arising from the chemical: This product is a high explosive with mass detonation hazard. DO NOT FIGHT FIRES INVOLVING EXPLOSIVE MATERIALS. Immediately evacuate all personnel from the area to a safe distance. Guard against re-entry. Thermal decomposition can lead to release of irritating gases and vapors.

Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH approved (or equivalent) and full protective gear.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Methods for containment: No information available.

Methods for cleaning up: Review fire and explosion hazards before proceeding with clean up. Remove and protect ignition sources. Wear protective equipment during clean up. Mop up water using non-sparking tools. It is suggested that only personnel trained in Emergency Response should respond. Verify complete account of product(s). Notify authorities and follow applicable spill reporting requirements.

SECTION 7 – HANDLING AND STORAGE

Handling: This product is an explosive and should only be used under the supervision of trained personnel. Protect containers from physical damage. Keep away from incompatible materials, heat, sparks, flames and other ignition sources. Avoid rough handling.

Storage: Store under moderate temperatures recommended by a technical services representative. Store under dry conditions in a well ventilated magazine that has been approved for either detonator storage or explosive storage. Do NOT store explosives in a detonator magazine or detonators in an explosive magazine. Keep away from heat, sparks and flames. Keep containers closed. Explosives should be kept well away from initiating explosives; protected from physical damage; separated from oxidizing materials, combustibles, and sources of heat. Keep away from incompatibles.

SECTION 8 – EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Measures: Full-handling precautions should be taken at all times.

Personal Protective Equipment

Eye/Face Protection: Tightly fitting safety goggles

Skin Protection: Long sleeved clothing.

Respiratory Protection: No special protective equipment required.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Cords covered with PVC or polyethylene plastic and/or wax and textiles	Odor:	None
Physical State:	Solid	Viscosity:	No information available
pH:	No data available	Flash Point:	Not applicable
Autoignition Temperature:	No data available	Boiling Point/Range:	Not applicable
Melting Point/Range:	No data available	Flammable Limits (Upper):	Not applicable
Flammable Limits (Lower):	Not applicable	Explosion Power:	No data available
Specific Gravity:	No data available	Water Solubility:	Negligible
Other Solubility:	Not applicable	Vapor Pressure:	No data available
Oxidizing Properties:	Not available	Partition Coefficient (n-octanol/water):	No data available

SECTION 10 – STABILITY AND REACTIVITY

Stability:	Can explode from impact, heat or friction. PETN explodes at 190 - 210 °C (374 - 410 °F). Stable up to approximately 70 °C.
Conditions to avoid:	Keep away from heat, impact, and friction. Some cords have limited tensile strength and abrasion resistance. Refer to the Product Bulletin for proper applications and use procedures. Damaged cords can lead to misfired holes - potentially, the most hazardous of all blasting situations. Avoid abrasion of cord on hole collars or casing pipes.
Incompatible materials:	Strong oxidizing agents, The PVC/polyethylene plastic or wax covering will, in time, be affected by diesel oil.
Hazardous decomposition products:	Carbon oxide. Nitrogen oxides (NOx). Hydrocarbons.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information:	Irritating to eyes. May cause skin irritation. Harmful if swallowed.
Chronic Toxicity:	Not available.
Carcinogenicity:	The ingredients of this product are not classified as carcinogenic by ACGIH (American Conference of Governmental Industrial Hygienists) or IARC (International Agency for Research on Cancer), not regulated as carcinogens by OSHA (Occupational Safety and Health Administration), and not listed as carcinogens by NTP (National Toxicology Program).
Mutagenic effects:	There is no evidence of mutagenic potential.
Irritation:	Irritating to eyes. May cause irritation of respiratory tract. May cause skin irritation in susceptible persons.
Reproductive effects:	No information is available and no adverse reproductive effects are anticipated.
Developmental effects:	No information is available and no adverse developmental effects are anticipated.
Target Organ:	Eyes, skin, respiratory system, blood, liver, urinary tract, gastrointestinal tract (GI), endocrine system, & immune system.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity effects:	There is no known ecological information for this product.
Persistence/Degradability:	Not applicable.
Mobility in Environmental media:	Not applicable.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Method:	Burn under supervision of an expert at an explosive burning ground or destroy by detonation in boreholes, in accordance with applicable local, provincial and federal regulations. Call upon the services of an Orica Technical Representative.
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SECTION 14 – TRANSPORT INFORMATION

DOT Proper Shipping Name: Cord, Detonating
Hazard Class: 1.1D
UN-No: UN0065
Packing group: II

TDG Proper Shipping Name: Cord, Detonating
Hazard Class: 1.1D
UN-No: UN0065
Packing group: II

SECTION 15 – REGULATORY INFORMATION

CANADIAN CLASSIFICATION: This product has been classified in accordance with the hazard criteria of the CPR (Controlled Products Regulations) and this MSDS contains all the information required by the CPR

WHMIS hazard class: This product is an explosive and is not regulated by WHMIS.

USA CLASSIFICATION:

SARA Regulations Sections 313 and 40 CFR 372: This product contains the following toxic chemical(s) subject to reporting requirements,

SARA 311/312 Hazardous Categorization

Acute Health Hazard: No
Chronic Health Hazard: No
Fire Hazard: No
Reactive Hazard: Yes
Sudden Release of Pressure Hazard: No

Ozone Protection and 40 CFR 42: No reportable quantities of ozone depleting agents

Other Regulations/Legislations which apply to this product: No information available.

TSCA: Complies

DSL: Complies

NDSL: Complies

SECTION 16 – OTHER INFORMATION

Prepared by: Safety Health & Environment
303-268-5000

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REFERENCES:

RTECS-Registry of Toxic Effects of Chemical Substances, CCINFODisc, Canadian Centre for Occupational Health and Safety, National Institute for Occupational Safety and Health, U.S. Dept. of Health & Human Services, Cincinnati, 1998.

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CHEMINFO, HSDB, & NIOSH through "CCINFODisc", Canadian Centre for Occupational Health and Safety, Hamilton, Ontario, Canada, 1998.

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Threshold Limit Values and Biological Exposure Indices for 1997, American Conference of Governmental Industrial Hygienists, Cincinnati, 1997.

Windholz, Martha, Ed., The Merck Index, 11 th ed., Merck and Co., Inc., Rahway, New Jersey, 1989

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End of MSDS