



IMR POWDER COMPANY

1060 Military Turnpike, Suite 2, Plattsburgh, NY 12901 Tel: (518) 563-2253 Fax: (518) 563-6916

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFICATION
NAME: **SINGLE BASE SMOKELESS POWDER**
TRADE NAMES AND SYNONYMS:

IMR####, SR####, PB

= Number Designation for Products

MANUFACTURER

PRODUCT INFORMATION PHONE:
MEDICAL EMERGENCY PHONE:
TRANSPORTATION EMERGENCY PHONE: (450) 371-5520

HAZARDOUS COMPONENTS

CHEMICAL	CAS NUMBER
Nitrocellulose	9004-70-0
2,4-Dinitrotoluene	121-14-2

PHYSICAL DATA

Specific Gravity: 1.65
Solubility in H2O: Negligible
Color: Black
Form: Perforated or nonperforated small discs or perforated cylinders.

HAZARDOUS REACTIVITY

INSTABILITY: Unstable with heat, Unstable with static charges. Unstable with impact. Not hazardous if product used properly.

INCOMPATIBILITY: Incompatible with acids, alkalies, oxidants.

DECOMPOSITION: Decomposes with heat. Hazardous gases produced are carbon monoxide. Decomposes with impact, static charges.

POLYMERIZATION: Polymerization will not occur.

FIRE AND EXPLOSION DATA

Ignition Temperature 160-170 degC

FIRE AND EXPLOSION HAZARDS

Hazardous gases produced in fire are carbon monoxide. 1.3C Explosive (DOT)>100 lbs.; Flammable Solid 100 lbs. or less. Burns uncontrollably. Produces shrapnel if confined.

EXTINGUISHING MEDIA

None.

SPECIAL FIRE FIGHTING INSTRUCTIONS

Do not fight fire. Isolate area. Evacuate personnel to a safe area. Guard against intruders.

HEALTH HAZARD INFORMATION

PRINCIPAL HEALTH HAZARDS

These products have not been tested for toxicity. They are 1.3C Explosives and burning, confined or uncon-

confined, can cause physical injury, including death. The toxicity effects given below for the hazardous components may result from gross chronic or acute overexposure to the products by inhalation, eye or skin contact or ingestion.

2,4-DINITROTOLUENE

Inhalation LC50: 2.87 mg/l, 1 hour in rats.

Skin Absorption ALD: >1,000 mg/kg in rabbits.

Oral LD50: 177 mg/kg in rats.

This compound is toxic by inhalation and ingestion. It is a skin and eye irritant. Toxic effects described in animals from exposure by inhalation, ingestion, or skin contact include nonspecific effects such as reduced weight gain, methemoglobinemia and effects on the central nervous system, the reproductive system, and bone marrow. In animal tests, technical grade 2,4-dinitrotoluene has carcinogenic activity. Tests for mutagenic activity in bacterial and mammalian cell cultures have been both positive and negative. It has demonstrated no embryotoxic activity in animals. It produces testicular degeneration and decreased spermatogenesis in rats, mice and dogs. Reduction in male fertility occurs in dominant lethal studies in rats.

Human health effects from overexposure in inhalation, skin or eye contact or ingestion may initially include reduction of the blood's oxygen carrying capacity with cyanosis, weakness, or shortness of breath by methemoglobin formation; nonspecific discomfort such as nausea, headache, confusion, incoordination, loss of consciousness, temporary lung irritation effects with cough, discomfort, difficulty breathing, or shortness of breath; or joint pain. The compound appears to be able to significantly permeate the skin. Individuals with preexisting diseases of the central nervous system, peripheral nervous system, lungs, or reproductive organs may have increased susceptibility to the toxicity of excessive exposures.

PROTECTION INFORMATION

GENERALLY APPLICABLE CONTROL MEASURES AND PRECAUTIONS

Use only with adequate ventilation. Keep away from heat, sparks and flames. Keep container in a cool place. Keep container tightly closed. Avoid dust generation. Do not mix with acids, alkalies. Do not consume food, drink or tobacco in areas where they may become contaminated with this material. Use spark-proof tools and equipment. Do not allow powder to accumulate in exhaust systems.

PERSONAL PROTECTIVE EQUIPMENT

Safety glasses. Protective cotton gloves.

SPILL, LEAK, OR RELEASE

Review FIRE AND EXPLOSION HAZARDS and SAFETY PRECAUTIONS before proceeding with clean up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up.

Remove source of heat, sparks, flame, impact, friction or electricity. Pick up by hand for disposal. Do not use power equipment. Do not use damaged or wet material. Control access to area and remove sources of heat or impact. Never return to container for reuse. Use nonsparking tools for cleanup.

WASTE DISPOSAL

Consult an explosives manufacturer for recommended methods of destroying explosive materials. Comply with applicable Federal Regulations under the authority of the Resource Conservation and Recovery Act (40 CFR, parts 260-271). May be stored under water until disposed of.

NITROCELLULOSE

Oral LD50: >5,000 mg/kg in rats.

The compound is not a skin or eye irritant.

CARCINOGENICITY

NONE OF THE COMPONENT(S) OF THIS MATERIAL IS LISTED AS A CARCINOGEN BY HTP, IARC, OR OSHA.

Expro controls the following component(s) as potential carcinogen(s): 2,4-Dinitrotoluene Tel: (450) 371-5520

EXPOSURE LIMITS

TLV * (ACGIH) : None established.

PEL (OSHA) : None established.

* TLV is a registered trademark.

2,4-Dinitrotoluene: AEL	0.5mg/M3, 8&12 hr TWA
	Skin
	PEL (OSHA) 1.5mg/M3, Skin
	TLV (ACGIH) 1.5mg/M3, Skin

SAFETY PRECAUTIONS

Do not breathe dust. Do not get in eyes. Do not get on skin. Do not get on clothing. Wash thoroughly after handling. Wash clothing after use. Don't breathe burning powder fumes. Keep out of reach of children.

FIRST AID

INHALATION:

If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT:

In case of contact, wash skin with soap and plenty of water.

EYE CONTACT:

In case of contact, immediately flush eyes with plenty of water for atleast 15 minutes. Call a physician.

INGESTION:

If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Call a physician.

NOTE: Burning smokeless powder may cause extensive and deep burns. Get medical attention immediately. Immerse burned area in cold water.

NOTE TO PHYSICIANS: Absorption of 2,4-Dinitrotoluene into the body may lead to the formation of methemoglobin that, in sufficient concentration, causes cyanosis, since reversion of methemoglobin to hemoglobin occurs spontaneously after termination of exposure, moderate degrees of cyanosis need be treated only by supportive measures such as bed rest and oxygen inhalation. Thorough cleansing of the entire contaminated area of the body, including scalp and nails is of utmost importance. If cyanosis is severe, intravenous injection of methylene blue, one milligram per kilogram of body weight, may be of value. Cyanocobalamin (Vitamin B12), one milligram intramuscularly, may speed recovery. Intravenous fluids and blood transfusions may be indicated in very severe exposure.

SHIPPING INFORMATION

Check manufacturer or shipper for specific information.

STORAGE CONDITIONS

Store in well ventilated area. Store in cool place. Keep container tightly closed. Do not store with other explosives. Store in accordance with National Regulations. Do not store or consume food, drink, or tobacco in area where they may become contaminated with this material. Store in approved type magazine.

ADDITION INFORMATION AND REFERENCES

PERSONS HANDLING EXPLOSIVES MUST BE TRAINED IN THE CORRECT PROCEDURES FOR THEIR USE.

Date of latest Revision: May 1, 2001
Person Responsible for MSDS: Product Manager
Address: 1080 Military Turnpike, Suite 2
Plattsburgh, NY 12901
Telephone: (518) 563-2253
(518) 561-9530
(905) 814-1696