

OLIN CORPORATION -- BALL POWDER PROPELLANT,P/N 9345271 -- 1376-01-132-1692

===== Product Identification =====

Product ID:BALL POWDER PROPELLANT,P/N 9345271

MSDS Date:04/10/1992

FSC:1376

NIIN:01-132-1692

MSDS Number: BPZTZ

=== Responsible Party ===

Company Name:OLIN CORPORATION

Address:120 LONG RIDGE ROAD

Box:1355

City:STAMFORD

State:CT

ZIP:06904-1355

Country:US

Info Phone Num:203-356-2000

Emergenc

y Phone Num:800-OLIN-911(800-654-6911)

CAGE:99530

=== Contractor Identification ===

Company Name:OLIN CORPORATION

Address:501 MERRITT 7

Box:4500

City:NORWALK

State:CT

ZIP:06856-4500

Country:US

Phone:203-750-3000/800-511-MSDS

CAGE:99530

===== Composition/Information on Ingredients =====

Ingred Name:NITROGLYCERIN (NG) (SARA III)

CAS:55-63-0

RTECS #:QX2100000

Fraction by Wt: 0-40%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:S,C, 0.2 MG/M3 STEL

ACGIH TLV:S, 0.46 MG/M3; 9293

EPA Rp

t Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingred Name:DIBUTYL PHTHALATE (SARA III)
CAS:84-74-2
RTECS #:TI0875000
Fraction by Wt: 0-10%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:5 MG/M3
ACGIH TLV:5 MG/M3
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingred Name:POLYESTER ADIPATE
Fraction by Wt: 0-10%
Other REC Limits:NONE RECOMMENDED

Ingred Name:ETHYL CENTRALITE
CAS:85-98-3
RTECS #:FE0350000
Fraction by Wt: 0-10%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:NOT KNOWN
ACGIH TLV:NOT KNOWN

Ingred Name:ROSIN ACID
CAS:8050-09-7
Fraction by Wt: 0-2%
Other REC Limits:NONE RECOMMENDED

Ingred Name:ETHYL ACETATE (SARA III)
CAS:141-78-6
RTECS #:AH5425000
Fraction by Wt: 0-1.5%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:400 PPM
ACGIH TLV:400 PPM
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:DIPHENYLAMINE
CAS:122-39-4
RTECS #:JJ7800000
Fraction by Wt: 0-1.5%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:10 MG/M3
ACGIH TLV:10 MG/M3

Ingred Name:N-NITROSODIPHENYLAMINE (SARA III)
CAS:86-30-6
RTECS #:JJ98000

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Fraction by Wt: 0-1.5%

Other REC Limits:NONE RECOMMENDED

EPA Rpt Qty:100 LBS

DOT Rpt Qty:100 LBS

Ingred Name:POTASSIUM NITRATE

CAS:7757-79-1

RTECS #:TT3700000

Fraction by Wt: 0-1.5%

Other REC Limits:NONE RECOMMENDED

Ingred Name:POTASSIUM SULFATE

CAS:7778-80-5

RTECS #:TT5900000

Fraction by Wt: 0-1.5%

Other REC Limits:NONE RECOMMENDED

Ingred Name:TIN DIOXIDE.TIN(IV) OXIDE.

CAS:18282-10-5

RTECS #:XQ4000000

Fraction by Wt: 0-1.5%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:2 MG(SN)/M3

ACGIH TLV

:2 MG(SN)/M3

Ingred Name:2-NITRODIPHENYLAMINE

CAS:119-75-5

Fraction by Wt: 0-1.3%

Other REC Limits:NONE RECOMMENDED

Ingred Name:GRAPHITE,NATURAL

CAS:7782-42-5

RTECS #:MD9659600

Fraction by Wt: 0-1%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15 MPPCF RDUST

ACGIH TLV:2 MG/M3 RDUST; 9293

Ingred Name:CALCIUM CARBONATE.OSHA PEL 5 MG/M3 RESP FRACTION.ACGIH FOR

TOTAL DUST CONTAINING NO ASBESTOS & 38C,SUBJECT TO MECH SHOCK,EXPOSE TO DIRECT LIGHT.

Other Precautions:STORE IN ORIGINAL SHIPPING CONTA

INERS FOR EXPLOSION

VENTING PURPOSES.CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL
CONTAMINATION FROM THE USE OF THIS MATERIAL.DO NOT TAKE
INTERNALLY.AVOID CONTACT WITH SKIN,EYES,AND CLOTHING. (SEE SUPP
DATA)

===== Exposure Controls/Personal Protection =====

Respiratory Protection:RESPIRATORY PROTECTION NOT NORMALLY NEEDED.IF
SIGNIFICANT DUSTING OCCURS,WEAR A NIOSH/MSHA APPROVED DUST
RESPIRATOR WITH HIGH EFFICIENCY FILTERS.

Ventilation:LOCAL EXHAUST VEN

TILATION IS RECOMMENDED IF SIGNIFICANT

DUSTING OCCURS.OTHERWISE,USE GENERAL EXHAUST VENTILATION.

Protective Gloves:IMPERMEABLE GLOVES

Eye Protection:SAFETY GLASSES WITH SIDE SHIELDS.

Other Protective Equipment:IMPERVIOUS BOOT,APRON,PROTECTIVE SUIT AND
HARD HAT.

Work Hygienic Practices:UPON CONTACT WITH SKIN OR EYES,WASH OFF WITH
WATER.REMOVE CONTAMINATED CLOTHING IMMEDIATELY & LAUNDRY BEFORE REUSE.

Supplemental Safety and Health

CONTRACT DAAA09-91-C-0494.BULK DENSITY:0.5-1 G/CC.FIRE FIGHT
PROC:OR

EXPLOSIVE RESISTANT BUNKER.SPILL PROC:OVERFLOW DAM W/ FILTRATION
CAPABILITIES TO RETAIN MATERIAL.DIVERT WATER FLOW OR STOP IF POSSIBLE.
GATHER WET MATERIAL.KEEP MATERIAL DAMP.OTHER PREC:SHELF LIFE INDEFINITE
WHEN KEPT UNDER 100F.

===== Physical/Chemical Properties =====

Melt/Freeze Pt:M.P/F.P Text:NOT KNOWN

Decomp Temp:Decomp Text:>122F,>50C

Vapor Pres: