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U.S. HIGH PRODUCTION VOLUME (HPV)

CHEMICAL CHALLENGE PROGRAM

ROBUST SUMMARY

4-Nitro-N-Methylphthalimide (CAS RN 41663-84-7)

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Prepared for:

U.S. Environmental Protection Agency

Washington, D.C., USA

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Table of Contents

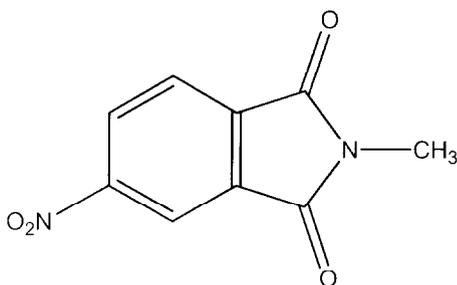
	Page
4-Nitro-N-Methylphthalimide [CAS RN 41663-84-7]	Page
CHEMICAL IDENTITY AND USE INFORMATION	3
ROBUST SUMMARY	5
Physical and Chemical Data	5
1.0 Melting Point	5
2.0 Boiling Point	6
3.0 Vapor Pressure	6
4.0 Partition Coefficient ($\text{Log}_{10}P_{ow}$)	7
5.0 Water Solubility	8
5.1 Solubility	8
5.2 pH Value, pKa Value	9
Environmental Fate and Pathways	9
6.0 Photodegradation	9
7.0 Stability in Water	9
8.0 Transport and Distribution Between Environmental Compartments, Including Estimated Environmental Concentrations and Distribution Pathways	11
8.1 Theoretical Distribution (Fugacity Calculation)	11
9.0 Biodegradation	11
Ecotoxicological Data	12
10.0 Acute/Prolonged Toxicity to Fish	12
11.0 Toxicity to Aquatic Plants (e.g. Algae)	14
12.0 Acute Toxicity to Aquatic Invertebrates	17
Toxicity	20
13.0 Acute Toxicity	20
13.1 Acute Oral Toxicity	20
13.2 Acute Inhalation Toxicity	21
13.3 Acute Dermal Toxicity	22
14.0 Genetic Toxicity <i>In Vitro</i> or <i>In Vivo</i> (Chromosomal Aberrations)	23
15.0 Genetic Toxicity <i>In Vitro</i>	25
15.1 Bacterial Test	25
15.2 Non-Bacterial In Vitro Test (Mammalian Cells)	27
16.0 Repeated Dose Toxicity	29
17.0 Reproductive Toxicity	32
18.0 Developmental Toxicity/Teratogenicity	32

CHEMICAL IDENTITY AND USE INFORMATION**CAS RN:**

41663-84-7

CHEMICAL NAME:

4-Nitro-N-Methylphthalimide

STRUCTURE, MOLECULAR WEIGHT, FORMULA:Molecular Formula: C₉H₆N₂O₄

Molecular Wt.: 206.16

OTHER CHEMICAL IDENTITY INFORMATION1H-Isoindole-1,3(2H)-dione, 2-methyl-5-nitro-
N-Methyl-4-nitrophthalimide**USE PATTERN**

4-Nitro-N-methylphthalimide (4-NPI) is primarily a site-limited intermediate made at a single location in the U.S. Greater than 99.95% of the 4-NPI produced is used as a reactive intermediate to make high molecular weight polyetherimide polymers. The remaining fraction of produced 4-NPI (approximately 0.05%) is sold as a reactive intermediate to make a non-food contact industrial adhesive. 4-NPI is manufactured in two forms; a 0.3% slurry and a 30-60% wet cake.

TEST PLAN

4-NITRO-N-METHYLPHthalimide CAS RN: 41663-84-7		Information	OECD Study	GLP	Other Study	Estimation Method	Acceptable	SIDS Testing Required
STUDY		Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N
PHYSICAL AND CHEMICAL DATA								
1.0	Melting Point	Y	Y	Y	N	N	Y	N
2.0	Boiling Point	Y	Y	Y	N	N	Y	N
3.0	Vapor Pressure	N						Y
4.0	Partition Coefficient	Y	Y	Y	N	N	Y	N
5.0	Water Solubility	Y	Y	Y	N	N	Y	N
ENVIRONMENTAL FATE AND PATHWAY								
6.0	Photodegradation	N						Y
7.0	Stability in Water	Y	Y	Y	N	N	Y	N
8.0	Transport and Distribution	N						Y
9.0	Biodegradation	N						Y
ECOTOXICITY								
10.0	Acute Toxicity to Fish	Y	Y	Y	N	N	Y	N
11.0	Toxicity to Algae	Y	Y	Y	N	N	Y	N
12.0	Acute Toxicity to Daphnia	Y	Y	Y	N	N	Y	N
TOXICITY								
13.0	Acute Toxicity	Y	N	Y	N	N	Y	N
14.0	Genotoxicity <i>In Vitro</i> or <i>In Vivo</i> (Chromosome Aberration Tests)	Y	N	Y	Y	N	Y	N
15.1	Genotoxicity <i>In Vitro</i> (Bacterial Test)	Y	N	Y	Y	N	Y	N
15.2	Genotoxicity <i>In Vitro</i> (Mammalian Cells)	Y	N	Y	Y	N	Y	N
16.0	Repeated Dose Toxicity	Y	N	Y	Y	N	Y	N
17.0	Reproductive Toxicity	N						Y
18.0	Development Toxicity / Teratogenicity	Y	N	Y	Y	N	Y	N