

Chemistry Report for Case # P-21-0174 (Version name 1)

General

Submitter:Marubeni America Corporation

Contact: William Olson

Contact Telephone No.: (703) 590 7337

TS No.: MC021B

Chemist: Butler, T

Contractor Support:

PV Init (kg/yr): [REDACTED]

PV Max (kg/yr): [REDACTED]

Binding Option: ☐

Exposure-Based Review: [REDACTED]

Manufacture: ☐

Import: ☒

Chemical ID

CAS Number: [REDACTED]

Chemical Name: [REDACTED]
[REDACTED]

Trade Name: [REDACTED]

IES Order: [REDACTED]

Generic Name:Carbonic acid, ester, polymer with alkanediol (C=4,5)

Chemistry Assessor:Tristan Butler

Chemical Structure



Physical Chemical Properties

Molecular Formula: [REDACTED]	Molecular Weight: [REDACTED]
% < 500: [REDACTED]	% < 1000: [REDACTED]
MP: [REDACTED]	MP Estimate:
BP:	BP Pressure:
BP Estimate: >400	
VP (Torr):	VP Estimate (Torr): <0.000001
Water Solubility (g/L):	Water Soluble Estimate (g/L): 0.006/Reacts slowly
Log P:	Log P Estimate: 2.79
Physical State — Neat: [REDACTED]	
Physical State — Manuf: NK: Imported	
Physical State — Processing: NA	
Physical State — End Use: Destroyed	

Additional Chemical Info:

NAVG MW = [REDACTED] with [REDACTED] % < 500 and [REDACTED] % < 1000 (PMN submission). The GPC attachment reports a NAVG MW of [REDACTED] with [REDACTED] < 500 and [REDACTED] < 1000.

Submitted properties: [REDACTED] MP = [REDACTED] °C;
[REDACTED] Density = [REDACTED] g/cm³; BP > [REDACTED] °C at 1 torr; Flash point = [REDACTED] °C; Viscosity = [REDACTED]

Estimated properties for low weight [REDACTED] g/mol structure (EPI, MP = 20°C, SMILES = [REDACTED])

[REDACTED]: BP = 584.81 °C; VP = 1.12E-13 torr; WS = 0.006 g/L; logP = 2.79.

Continued on P.6 A biodegradability test demonstrated that the PMN substance reacts with water slowly to release [REDACTED]

Over a timespan of 28 days, 27% Disappearance rate of the PMN substance in water was measured and [REDACTED]

[REDACTED] were detected as hydrolysis byproducts. The PMN material is expected to hydrolyze with a half-life of months to give [REDACTED]

Uses

Consumer Use? [REDACTED]

Intended Uses (ICB):

Intended use: [REDACTED]

Analogues (same use): [REDACTED]

Patents (same use): [REDACTED]

Other Uses:

Analogues (other use): [REDACTED]

Analogues (same and other use): None found.

Patents (other use): None found.

Reaction Description

The PMN substance is imported and no manufacturing information was provided. The following is based on the list of feedstocks on P.5 of the PMN submission.

Pollution Prevention Analysis(P2 Analysis:)

None found.

Analogs

Analogues:

Comments/Telephone Log

Attachments	Update/Upload Time	Update/Upload By

Historic Documents

Attachments	Version Number	Updated/Uploaded Time	Updated/Uploaded By
-------------	----------------	-----------------------	---------------------

Current Version Comments

Comment	Update/Upload Time	Update/Upload By
---------	--------------------	------------------