

Chemistry Report for Case # P-18-0211

General

Submitter:Patcham USA LLC

Contact: John Massingale

Contact Telephone No.: (561) 578-8110

TS No.: PDA322

Chemist: Yakal, Randy

Contractor Support: Y

PV Init (kg/yr): [REDACTED]

PV Max (kg/yr): [REDACTED]

Binding Option:

Exposure-Based Review: [REDACTED]

Manufacture:

Import:

CAS Number:None

Chemical Name [REDACTED]

Trade Name:Pat-Add DA3222

IES Order:434022

Generic Name:Alkaneamine,
(aminoalkyl)-, polymer with aziridine and 1,6-diisocyanatohexane,
polyethylene glycol alkyl ether- and polyethylene-polypropylene glycol
aminoalkyl alkyl ether- and alkenyl benzenated polyethylene glycol Ph
ether

Chemical Structure

[REDACTED]

Physical Chemical Properties

Molecular Formula: [REDACTED]	Molecular Weight: [REDACTED]
% < 500: [REDACTED]	% < 1000: [REDACTED]
MP:	MP Estimate:
BP:	BP Pressure:
BP Estimate: >400	
VP (Torr):	VP Estimate (Torr): <0.000001
Water Solubility (g/L):	Water Soluble Estimate (g/L): Dispersible
Log P:	Log P Estimate:
Physical State — Neat: Liquid	Physical State — Manuf: NK - Imported

Physical State — Processing: Solution, 10% PMN material in solventborne paint

Physical State — End Use: Solid,
PMN material entrained in dried/cured coating

Additional Chemical Info

Submitted

data: NAVG MW = [REDACTED] by GPC with [REDACTED]% less than 500 and [REDACTED]% less than 1000; liquid; insoluble in water (est.); density = 1.06. The submitted MSDS refers to the PMN material as a "surface active agent" indicating that the PMN material is dispersible in water. An IR spectrum was not provided.

Estimated data: high boiling point and negligible vapor pressure.

Amine FGEW = [REDACTED] (worst case, based on [REDACTED]).

SMILES for representative structures are on page 6 of this report. SMILES for the structure as drawn with all repeating units equal to one, [REDACTED] MW [REDACTED]:

[REDACTED]

.
SMILES

for [REDACTED] reacted with [REDACTED] MW [REDACTED]: [REDACTED]

.

SMILES for

[REDACTED] with [REDACTED] where
all repeating units are equal to one, [REDACTED] MW [REDACTED]

[REDACTED]

.

SMILES for

[REDACTED] reacted with [REDACTED] MW [REDACTED]
[REDACTED]

Uses

Consumer Use? No

Use: Wetting and dispersing agent for solventborne pigment formulations, paints, and coatings.
Amine FGEW = [REDACTED].

Other Uses:

No other uses were found for the PMN material.

Reaction Description

The PMN material is imported; a brief synthetic scheme was provided in an attachment to the submission.

Pollution Prevention Analysis(P2 Analysis:)

P2

Claim: The new chemical substance is a wetting and dispersing agent for pigment formulations, paints, and coatings. The substance will be identified under the trade name Pat-Add DA3222. The substance will be manufactured by the PMN submitter's parent company, Patcham (FZC), and then imported by Patcham USA LLC. (Patcham USA). After import, Patcham USA will distribute the substance to industrial formulators who will produce pigment formulation, paint, and coating products. These formulated products will then be distributed to industrial end users who will use these products in a range of applications to produce final articles.

Pollution Prevention Information

1. The new chemical substance will be manufactured overseas and then imported by Patcham USA. There will be no domestic manufacture. This means that no human exposure or environmental releases will occur involving the manufacture or processing of the Pat-Add DA3222 at sites controlled by the submitter.
2. The new chemical substance will be imported at relatively

low annual volumes. In addition, the compound will be used at relatively low levels in pigment formulation, paint, and coating products.

3.

There will be no spray applications involving the pigment formulation, paint, and coating products containing the substance.

4. The new

chemical substance will only be processed and used by industrial companies. No commercial or consumer processors or end users are expected to exist.

5. The pigment formulation, paint, and coating products containing the new chemical substance will be solventborne products; not waterborne products. Therefore, waste streams involving these formulated products are expected to undergo incineration rather than be released to POTWs.

Analogs

Analogs:

[REDACTED]

Comments/Telephone Log

Artifact

[REDACTED]

Update/Upload Time

[REDACTED]