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November 9, 2006

Document Control Office (DCO) (7407M)
Office of Pollution Prevention and Toxics (OPPT)
U.S. Environmental Protection Agency (EPA)
1200 Pennsylvania Ave., NW
Washington, DC 20460-0001

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ATTN: 8(d) Health and Safety Reporting Rule (Notification/Reporting)

Re: 8(d) PAIR Reporting for 3-Pentanone, CAS # 96-22-0 (EPA-HQ-OPPT-2005-0055)

ExxonMobil Chemical Company (EMCC) is strongly committed to the chemical industry's Responsible Care® program and takes seriously its commitment to the responsible manufacture, testing, and safe use of its products. As further evidence of this commitment, EMCC agreed to develop study summaries and hazard testing plans for over 130 chemicals under the U.S. Environmental Protection Agency (EPA) and International Council of Chemical Associations' High Production Volume (HPV) programs.

By copy of this letter, EMCC reaffirms its commitment to providing select hazard data for products it continues to manufacture. EMCC has reported very low volumes of 3-pentanone, CAS #96-22-0, in previous Inventory Update Reports (IURs). However, EMCC will not report this substance under its 2006 IUR. EMCC understands that other companies may report sufficient quantities of 3-pentanone such that this substance is likely to remain an HPV and that it will be retained on the 8(a) and 8(d) rules. To comply with the 8(d) rule (EPA-HQ-OPPT-2005-0055), EMCC acknowledges that it does not have unpublished health and safety data.

EMCC has in the past identified data in the public domain that could successfully characterize select endpoints within the HPV Challenge Program for 3-pentanone. To assist EPA in their review of data for this substance, EMCC is providing a table of HPV endpoints with values and references that may be useful in a screening evaluation of hazard (Attachment).

Please contact me if you require any further information on the status of EMCC commitments to the HPV Program.

Sincerely,

Nigel Sarginson

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Attachments

cc: Mr. Jim Willis
Director
Chemical Control Division
Office of Pollution Prevention and Toxics (OPPT)
U.S. Environmental Protection Agency (EPA)
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Washington, DC 20460-0001

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Attachment 1**Table 1. Environmental Data for 3-Pentanone (CAS #96-22-0)**

| Endpoint | Data Source | Value | Reference |
|--|-------------------------------|---|-------------|
| Environmental Toxicity | | | |
| Acute Toxicity to Fish* (mg/l) | Reference | 1540 | 5,6 |
| | Computer model | 955 | 1 |
| Acute Toxicity to Aquatic Invertebrates* (mg/l) | Reference | >500 | 7 |
| | Computer model | 939 | 1 |
| Toxicity to Aquatic Plants* (mg/l) | Reference | >500 | 7 |
| | Computer model | 546 | 1 |
| Environmental Fate | | | |
| Photodegradation Half-life (hrs; 12-hour day) | Computer model | 52.1 | 2 |
| Photodegradation, OH rate constant (cm ³ /molecule-sec) | Computer model | 2.46 E-12 | 2 |
| Stability in Water | Reference | Stable | 3,4 |
| Transport between Environmental Compartments (Level III Fugacity) | Computer model | Air 12.3% Water 42.3% Soil 45.4% | 2 |
| Biodegradation | Computer model / Reference | Readily biodegradable | 2,8,9,10,11 |
| Log Bioconcentration Factor (log BCF) | Computer model | 0.5 (Log K _{ow} used in model = 0.99) | 2 |

Table 2. Physicochemical Data for 3-Pentanone (CAS #96-22-0)

| Endpoint | Data Source | Value | Reference |
|-------------------------------------|----------------|--------|-----------|
| Physicochemical | | | |
| Melting Point (deg C) | Reference | -39 | 12 |
| | Computer model | -67.7 | 2 |
| Boiling Point (deg C) | Reference | 101.9 | 12 |
| | Computer model | 95.0 | 2 |
| Vapor Pressure (mm Hg; 25 deg C) | Reference | 37.7 | 13 |
| | Computer model | 39.9 | 2 |
| Water Solubility (mg/l) | Reference | 48,100 | 14 |
| | Computer model | 18,140 | 2 |
| Log K _{ow} | Reference | 0.99 | 15 |
| | Computer model | 0.75 | 2 |

* Log K_{ow} used to calculate data = 0.99

Table 3. Mammalian Toxicity Data for 3-Pentanone (CAS #96-22-0)

| Endpoint | Result (Reference) |
|--|--|
| Acute | |
| Oral ¹ - Rat | LD ₅₀ = ~ 2900 mg/kg bw (16) LD ₅₀ = 2140 mg/kg bw (17, 18) LD ₅₀ = 2300 mg/kg bw (19) |
| Dermal ¹ - Rat | LD ₅₀ = 20 ml/kg; ~ 16.2 g/kg (18) |
| Dermal ¹ - Rabbit | LD ₅₀ = > 5000 mg/kg bw (19) LD ₅₀ = 20000 mg/kg bw (20) |
| Inhalation ¹ - Rat | LC _{Lo} = 8000 ppm/4hr; 28.5 mg/L (16, 18) |
| Genotoxicity | |
| DNA Damage /Repair Assay ¹ | Positive <ul style="list-style-type: none"> • Saaccharomyces cerevisiae D61 at 1.38-1.77% without activation (21) • Saaccharomyces cerevisiae D61 at 0.99-1.48% without activation (22, 23) |
| Repeated Dose | |
| Oral ¹ - Female Rat | 2.4% in drinking water (~1860 mg/kg/day for 120 days) <ul style="list-style-type: none"> • Body weights comparable to controls • Kidney weights increased • No microscopic changes • No neurotoxic effects observed (24) |
| Reproductive / Developmental | |
| Developmental Toxicity | No Data |
| Reproductive Toxicity | No Data |
| Irritation / Sensitization | |
| Ocular Irritation ¹ -Rabbit | Non-irritant (16) Irritating (18) |
| Dermal Irritation ¹ -Rabbit | Non-irritant (16) Non -Irritant (18) |
| Dermal Sensitization ¹ -Guinea Pig | Not Sensitizing (25) |

¹ Based on data reported in European Chemicals Bureau - IUCLID dataset for 3-Pentanone (CAS #96-22-0). 11-02-2000.

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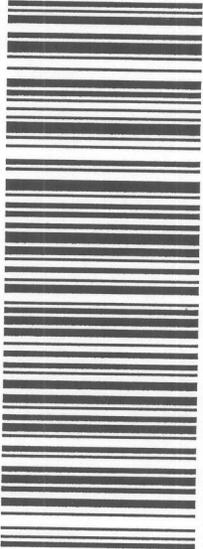
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| <p>NIGEL SARGINSON 281-870-6764 EXXONMOBIL CHEMICAL 13501 KATY FRWY HOUSTON TX 77079</p> <p>LTR</p> <p>1 OF 1</p> <p>SHIP TO: DOCUMENT CONTROL OFFICE (7407M) POLLUTION PREVENTION AND TOXICS 1200 PENNSYLVANIA AVE, NW US ENVIRONMENTAL PROTECTION AGENCY WASHINGTON DC 20004-2403</p> | <p>MD 201 9-80</p>  | <p>UPS NEXT DAY AIR</p> <p>TRACKING #: 1Z R39 4Y8 01 9675 8642</p> <p>1</p> |  | <p>BILLING: P/P</p> <p>CO CODE/COST CENTER: 0117-C020172324</p>  <p>CS 8.6.13.0 WXPTE60 54-0A 04/2006</p> |
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