U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue SE
Washington, DC 20590

NOV 07 2011

Raymond Papciak and Mike Stillwell
Huntsman Corporation
8600 Gosling Road
The Woodlands, TX 77381

Reference No.: 11-0239

Dear Messers Papciak and Stillwell:

This acknowledges our receipt of your September 12, 2011 letter requesting an amendment to §172.101 of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) to change the current classification of "UN 2815, N-Aminoethylpiperazine, Class 8, PGIII" to "UN 2815, N-Aminoethylpiperazine, Class 8, 6.1, PGII".

The UN number, hazard classification, and packing group are assigned by the United Nations Sub-Committee of Experts on the Transport of Dangerous Goods (SCOE-TDG). The SCOE-TDG will consider amending the classification of a substance based upon data submitted on the attached data sheet. Please complete the form and return it to this office. If needed, the form can also be found at:

http://www.unece.org/fileadmin/DAM/trans/danger/publi/unrec/rev17/English/00ERev17_Recommendations.pdf

Upon receipt of the completed data sheet, the Pipeline and Hazardous Materials Safety Administration, Office of Hazardous Materials Safety, will assess the information, and if merited, will forward your request to the SCOE-TDG for consideration.

Please contact us if you need any additional information or have any questions concerning the completion of the form.

Sincerely,

Delmer Billings
Senior Regulatory Advisor
Standards and Rulemaking Division

Figure 1

DATA SHEET TO BE SUBMITTED TO THE UNITED NATIONS FOR NEW OR AMENDED CLASSIFICATION OF SUBSTANCES

Submitted by.... ..... Date .....

Supply all relevant information including sources of basic classification data. Data should relate to the product in the form to be transported. State test methods. Answer all questions - if necessary state "not known" or "not applicable" - If data is not available in the form requested, provide what is available with details. Delete inappropriate words.

Section 1. SUBSTANCE IDENTITY

1.1 Chemical name

1.2 Chemical formula

1.3 Other names/synonyms

1.4.1 UN number .....1.4.2 CAS number .....

1.5 Proposed classification for the Recommendations

1.5.1 proper shipping name (3.1.2[1])... .....

1.5.2 class/division .....subsidiary risk(s) ..... packing group .....

1.5.3 proposed special provisions, if any .....

1.5.4 proposed packing instruction(s).....

Section 2. PHYSICAL PROPERTIES

2.1 Melting point or range.....°C

2.2 Boiling point or range .....°C

2.3 Relative density at :

2.3.1 15 °C .....

2.3.2 20 °C .....

2.3.3 50 °C .....

2.4 Vapour pressure at :

2.4.1 50 °C ..... kPa

2.4.2 65 °C ..... kPa

2.5 Viscosity at 20 °C[2] ..... m^2/s

2.6 Solubility in water at 20 °C ..... g/100 ml

2.7 Physical state at 20°C (2.2.1.1[1]) solid/liquid/gas[2]

---

[1] *This and similar references are to chapters and paragraphs in the Model Regulations on the Transport of Dangerous Goods.*

[2] *See definition of "liquid" in 1.2.1 of the Model Regulations on the Transport of Dangerous Goods.*

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[2] *See definition of "liquid" in 1.2.1 of the Model Regulations on the Transport of Dangerous Goods.*

2.8 Appearance at normal transport temperatures, including colour and odour .....

.....

2.9 Other relevant physical properties .....

.....

.....

Section 3. FLAMMABILITY

3.1 Flammable vapour

3.1.1 Flash point (2.3.3[1]) ..... °C oc/cc

3.1.2 Is combustion sustained? (2.3.1.3[1]) yes/no

3.2 Autoignition temperature ..... °C

3.3 Flammability range (LEL/UEL) ..... %

3.4 Is the substance a flammable solid? (2.4.2[1]) yes/no

3.4.1 If yes, give details .....

.....

.....

.....

Section 4. CHEMICAL PROPERTIES

4.1 Does the substance require inhibition/stabilization or other treatment such as nitrogen blanket to prevent hazardous reactivity ? yes/no

If yes, state:

4.1.1 Inhibitor/stabilizer used .....

4.1.2 Alternative method .....

4.1.3 Time effective at 55 °C .....

4.1.4 Conditions rendering it ineffective .....

4.2 Is the substance an explosive according to paragraph 2.1.1.1? (2.1[1]) yes/no

4.2.1 If yes, give details .....

.....

.....

.....

[1] *This and similar references are to chapters and paragraphs in the Model Regulations on the Transport of Dangerous Goods.*

4.3 Is the substance a desensitized explosive? (2.4.2.4[1]) yes/no

4.3.1 If yes, give details .....

.....

.....

4.4 Is the substance a self-reactive substance? (2.4.1[1]) yes/no

If yes, state:

4.4.1 exit box of flow chart... .....

What is the self-accelerating decomposition temperature (SADT) for a 50 kg package? ..... °C

Is the temperature control required? (2.4.2.3.4[1]) yes/no

4.4.2 proposed control temperature for a 50 kg package ..... °C

4.4.3 proposed emergency temperature for a 50 kg package ..... °C

4.5 Is the substance pyrophoric? (2.4.3[1]) yes/no

4.5.1 If yes, give details .....

.....

.....

.....

4.6 Is the substance liable to self-heating? (2.4.3[1]) yes/no

4.6.1 If yes, give details .....

.....

.....

.....

4.7 Is the substance an organic peroxide (2.5.1[1]) yes/no

If yes state:

4.7.1 exit box of flow chart... .....

What is the self accelerating decomposition temperature (SADT) for a 50 kg package?..... °C

Is temperature control required? (2.5.3.4.1[1]) yes/no

4.7.2 proposed control temperature for a 50 kg package ..... °C

4.7.3 proposed emergency temperature for a 50 kg package ..... °C

4.8 Does the substance in contact with water emit flammable gases? (2.4.4[1]) yes/no

4.8.1 If yes, give details .....

.....

.....

.....

[1] *This and similar references are to chapters and paragraphs in the Model Regulations on the Transport of Dangerous Goods.*

4.9 Does the substance have oxidizing properties (2.5.1[1]) yes/no

4.9.1 If yes, give details .....

.....

.....

.....

4.10 Corrosivity (2.8[1]) to:

4.10.1 mild steel .....mm/year at ..... °C

4.10.2 aluminium .....mm/year at..... °C

4.10.3 other packaging materials (specify)

.....mm/year at..... °C

.....mm/year at..... °C

4.11 Other relevant chemical properties .....

.....

.....

.....

Section 5. HARMFUL BIOLOGICAL EFFECTS

5.1 LD_{50}, oral (2.6.2.1.1[1])... .....mg/kg Animal species .....

5.2 LD_{50}, dermal (2.6.2.1.2[1]).....mg/kg Animal species .....

5.3 LC_{50}, inhalation (2.6.2.1.3[1]) ... .mg/litre Exposure time..... hours

or ....ml/m^3 Animal species .....

5.4 Saturated vapour concentration at 20 °C (2.6.2.2.4.3[1]) .....ml/m^3

5.5 Skin exposure (2.8[1]) results Exposure time ..... hours/minutes

Animal species.....

5.6 Other data .....

.....

.....

5.7 Human experience .....

.....

.....

Section 6. SUPPLEMENTARY INFORMATION

6.1 Recommended emergency action

6.1.1 Fire (include suitable and unsuitable extinguishing agents)

.....

6.1.2 Spillage .....

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[1] *This and similar references are to chapters and paragraphs in the Model Regulations on the Transport of Dangerous Goods.*

6.2 Is it proposed to transport the substance in:

6.2.1 Bulk Containers (6.8[1]) yes/no

6.2.2 Intermediate Bulk Containers (6.5[1])? yes/no

6.2.3 Portable tanks (6.7[1])? yes/no

If yes, give details in Sections 7, 8 and/or 9.

Section 7. BULK CONTAINERS (only complete if yes in 6.2.1)

7.1 Proposed type(s) .....

Section 8. INTERMEDIATE BULK CONTAINERS (IBCs) (only complete if yes in 6.2.2)

8.1 Proposed type(s).....

Section 9. MULTIMODAL TANK TRANSPORT (only complete if yes in 6.2.3)

9.1 Description of proposed tank (including IMO tank type if known).....

9.2 Minimum test pressure .....

9.3 Minimum shell thickness .....

9.4 Details of bottom openings, if any .....

9.5 Pressure relief arrangements .....

9.6 Degree of filling .....

9.7 Unsuitable construction materials .....

[1] *This and similar references are to chapters and paragraphs in the Model Regulations on the Transport of Dangerous Goods.*

Babich
§172.101
Shipping Name Class
11-0239

HUNTSMAN
Enriching lives through innovation

September 12, 2011

Via Certified Mail (7007 1490 0002 6577 4324)

U. S. Department of Transportation
Office of Hazardous Materials Standards Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590-0001

Attn: PH-10, US Department of Transportation, East Building

RE: Changes to the Hazardous Materials Table for N-Aminoethylpiperazine Class 8, UN 2815, PGIII per 49 CFR 172.101

Dear Sir or Madam:

Huntsman Corporation is requesting from the Associate Administrator for Hazardous Materials Safety a re-evaluation of the transport classification for UN 2815 N-Aminoethylpiperazine, from Class 8, PGIII to Class 8 (6.1), PGII.

Due to the recent availability of summarized toxicity testing data performed for the EU REACH legislation, it has come to Huntsman's attention that N-Aminoethylpiperazine (AEP), currently classified and listed in the Hazardous Material Table as a dermal corrosive, should also have the subsidiary risk of being dermally toxic, as well. In addition, animal data suggests that the Packing Group designation for AEP should be a Packing Group II.

The toxicity testing data that requires the reclassification of AEP is summarized in the IUCLID dossier for AEP which has been compiled by the AEP REACH Consortium. The data indicate:

- The dermal toxicity of AEP is given as 866 mg/kg. This toxicity value corresponds to a Dermal Toxic, Packing Group III. The data are summarized in Attachments 1 and 2.
- The dermal corrosivity of AEP is described in the IUCLID dossier as "...meets the criteria for classification as Corrosive, sub category 1B according to the GHS criteria, since necrosis was seen at the 20 minute time point rather than the 3 minute time point." This description would correspond to a transport Packing Group II. The data are summarized in Attachment 3.

Based on knowledge of this information, Huntsman is compelled to petition for a change in the current transport classification for AEP listed in the Hazardous Material Table 49 CFR 172.101 from the current classification of "UN 2815 N-Aminoethyl piperazine Class 8, PGIII" to "UN2815 N-Aminoethyl piperazine Class 8 (6.1), PGII."

8600 Gosling Road, The Woodlands, Texas 77381
Tel.: 1-281-719-7400 Fax.: 1-281-719-7500 www.huntsman.com

If I can provide any additional information or assistance, please call (281) 719 3017 or Mr. Mike Stillwell at (281) 719-3027

Regards,

Raymond Papciak
Manager, Product Safety

Mike Stillwell
Transportation Safety Lead,
Rail Security Coordinator

Attachments (3)