

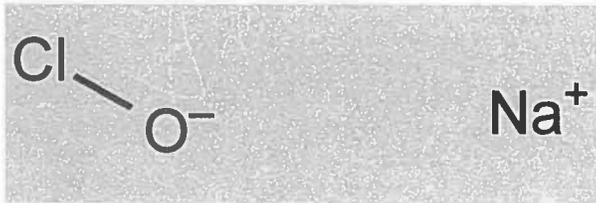


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

012 19

July 26, 2011.

DP BARCODE: 390559.
MRID: 484848-00, 484848-01.
SUBJECT: **Puma.**
REG. NO. OR FILE SYMBOL: 5813-100
DOCUMENT TYPE: Product Chemistry Review
Manufacturing-use OR End-use Product
INGREDIENTS (PC Codes) Sodium Hypochlorite Solution. (014 703)



CAS Number (7681-52-9)
TEST LAB: The Clorox Technical Center.
SUBMITTER: The Clorox Company.
GUIDELINE: EPA OPPTS 830.6317 & 830.6320 Group "B".
COMMODITIES: Formulation.
REVIEWER: Salvador Rodríguez
ORGANIZATION: AD
APPROVER: Karen P. Hicks
APPROVED DATE: 07/26/11.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
PREVENTION,
PESTICIDES AND
TOXIC SUBSTANCES

July 26, 2011.

MEMORANDUM

Subject: Product Chemistry Review for EPA Reg. # 5813-100.

From: Salvador Rodríguez, Chemist
Product Science Branch, CT Team
Antimicrobials Division (7510P)

Thru: Karen P. Hicks, CT Team Leader
Product Science Branch
Antimicrobials Division (7510P)

*Juan Negron
for 7/26/11
KPH*

To: Wanda Henson /David Liem
PM Team 32
Antimicrobials Division (7510P)

APPLICANT: The Clorox Company.

Action code: A570.

Due Date: 10/08/11.

Due date:
Product Formulation
Active Ingredient(s)

% by wt.

Sodium Hypochlorite.....8.25

BACKGROUND:

The Clorox Company, has submitted the studies OPPTS Guideline 830.6317 & 830.6320 required to support the registration for the fungicide, bacteriocide, and virucide non-integrated end-use product **Puma**. The registrant is submitting the study clorox formula F2009.0092, "Stoirage stability & Corrosion characteristics". MRID # 484848-01. The Product Chemistry Reviewer has received the following documents:

- A transmittal document, dated 05/13/11.
- A letter, dated 05/13/11.
- Application for pesticide amendment, dated 03/23/11.
- Data matrix, dated 05/13/11.
- Confidential Statement of Formula (CSF), dated 03/03/11, for the basic formulation.
- Study title: "Clorox Formula F2009.0092 – Preliminary Analysis" MRID # 484292-01

FINDINGS:

1. The OPPTS Guideline Series 830.6317 & 830.6320 Group B product chemistry data requirements applicable for end-use products are met. MRID # 484292-01
2. The CSF and the label have the same nominal.
3. All certified limits meet the EPA Standard Certified Limits.
4. The certified limits listed in the CSF do not meet the EPA standard certified limits. The registrant has indicated that a higher upper and lower limit has been requested to ensure that the active ingredient (AI) concentration remains above the lower certified limit over the shelf of the product. This wider certified limit has been accepted on 05/25/10. See recommendation section.
5. A statement of Good Laboratory Practice (GLP) compliance was provided for the study assigned MRID # 484848-01. It is stated that the physical/ chemical characterizations were conducted in accordance with GLP standards (40 CFR Part 160).
6. The test substance was stored at $(70 \pm 5^{\circ}\text{F})$ in a non-climate controlled warehouse for one year. Data obtained in this study verifies that the test substance is stable for a period of at least one year.

7. The results of the long-term storage and corrosion characteristics of the test material have been determined. The study is in accordance with the requirements of the US EPA, Office of Prevention, Pesticides and Toxic Substances, Series 830: Products Properties Test Guidelines OPPTS 830.6317 & 830.6320.

Timepoint (Months)	Average. % Sodium Hypochlorite	Standard Deviation
Zero Time	10.37	0.130
Three Months	8.64	0.029
Six Months	7.39	0.031
Nine Months	6.55	0.059
Twelve Months	5.90	0.050

12. After 12 months at (70 ± 5°F), no pitting, no thinning, no warping, no change in color, no cracks holes or mottling were noted for the commercial packaging material. Upon mechanical deformation, neither the container nor the closure cracked or split. In conclusion there was no significant change in the active ingredient content of the test material during the 12 months storage.

CONCLUSIONS:

The OPPTS Guideline Series 830.6317 & 830.6320 Group B product chemistry data requirements applicable for end-use products are acceptable. The result of one year storage stability and corrosion characteristics studies shows that the certified limit for the active ingredient (AI) is not within the EPA Standard Certified Limits. A justification for wider certified limits has been proposed and acceptable.