

## REQUEST #11249-1

### Relatively Odorless Volatile Solvents For Hydrophobic Resins

RESPONSE DUE DATE: [2008/10/24](#)

[Download Proposal Template](#)

**POINT OF CONTACT**

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[Indicate intention to submit proposal](#)

**SOLUTION PROVIDER HELP DESK**

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**Opportunity**

Product Supply, Joint Development

(click buttons above)

**Timeline**

1 to 3 years (to be discussed, depending on the technological level)

**Financials**

US\$ 100,000 per year (details to be discussed)

**REQUEST FOR PROPOSAL DESCRIPTION**

NineSigma, representing a multi-billion dollar cosmetics manufacturer, invites proposals for **Relatively Odorless Volatile Solvents for hydrophobic resins.**

The volatile oil component must satisfy the following conditions:

- **Volatility:** 35% to 45% volatilization in 2 hours at the conditions of 25 °C/ 65 % RH.
  - | Measuring conditions; 1 gram of the solvent is dropped on a filter paper in a glass dish (90mm  $\phi$ ), the amount of the solvent not vaporized is measured.
- **Odor:** No unpleasant or stimulating odor
- **Dissolving Ability:** Dissolves hydrophobic resins
- **Safety:** No clear toxicity to the human body at the present time
- **Stability:** The solvent functionality shown above (volatility, dissolving ability, odor, safety) is unchanged, both (1) after 4 hours at 120 °C, and (2) after 2 months at 50 °C

The above conditions are known to be satisfied by (1) silicones, (2) hydrocarbons, and (3) carbonic acid esters. Currently, the client's aim is to obtain a fourth type of volatile oil component other than the above. Proposals are also welcomed for compounds in the above categories

if they have not been used in the cosmetics industry. However, silicones under the heading Approaches Not of Interest, because the client has performed extensive evaluations of these materials.

Proposals must include the following items:

- Overview of the volatile oil component:
  - Molecular structure (to the extent that it can be written down)
  - Main applications at the present time
  - Unique properties
- Performance at the present time:
  - Volatility
  - Dissolving ability
  - Stability
  - Safety
  - Odor
- Ability to provide samples:
  - Samples for functional evaluation do not yet exist
  - Samples can be provided on the order of 100 g
  - Samples can be provided on the order of
    - 1 kg

Respondents should submit proposals using the Response Template

([http://files.ninesigma.com/mx/11249-1/Response\\_Template.doc](http://files.ninesigma.com/mx/11249-1/Response_Template.doc))

It is expected that proof-of-concept will require 1 year.

## **BACKGROUND**

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NineSigma's client, a major cosmetics manufacturer, is looking for a relatively odorless volatile solvent to use as the volatile oil component in cosmetics.

Decamethylcyclopentasiloxane, which is a silicone oil, has been widely used as the volatile oil component in cosmetics, but there has been no progress in developing newer volatile oil components.

As the range of cosmetic prescriptions grows, it will be useful to have many volatile solvents.

The client has already looked for new volatile oil components within the cosmetics industry.

However, they have now issued this open request beyond the cosmetics industry, to accelerate the development of new volatile oil components and hasten commercialization.

The client is issuing this open request for volatile solvents that meet the stated requirements, regardless of whether they would be appropriate for cosmetics, and then plans to select promising volatile solvents and engage in development to improve them.

## **POSSIBLE APPROACHES**

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Known Relatively Odorless Volatile Solvents other than silicones include:

- hydrocarbons
- carbonic acid esters

Proposals for substances other than these are anticipated. Proposals are also welcome for compounds in the above categories if they have not been used in the cosmetics industry.

## **ANTICIPATED PROJECT PHASES OR PROJECT PLAN**

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Respondents should submit proposals using the attached Response Template.

The client will further study promising proposals to select respondents that could be collaboration partners. After selection, samples will be obtained from the respondent and evaluated for the applicability to cosmetics. After detailed evaluation, when it has been verified that the final target performance can be achieved, the client will sign a joint development agreement with the respondent, and proceed to proof-of-concept and development. Or, if the technology does not require additional development, then product purchase will be considered.

## RESPONDING TO THIS REQUEST

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### NON-CONFIDENTIAL DISCLOSURE

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By submitting a Response you represent that the Response does not and will not be deemed to contain any confidential information of any kind whatsoever.

Your Response is limited to no more than 3 pages. The Response should briefly describe the technical approach and provide information on technology performance, background, and description of the responding team and their related experience.

By submitting a Response, you acknowledge that NineSigma's client reserves the sole and absolute right and discretion to select for award all, some, or none of the Responses received in for this announcement. NineSigma's client may also only choose to select specific tasks within a proposal for award. NineSigma's client has the sole and absolute discretion to determine all award amounts.

### RESPONSE EVALUATION

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NineSigma's client will evaluate the **Response** using the following criteria:

- Overall scientific and technical merit of the proposed approach
- Approach to proof of concept or performance
- Potential for proprietary position (i.e., is the technology novel or protectable)
- Economic potential of concept
- Respondent's capabilities and related experience
- Realism of the proposed plan and cost estimates

The client will contact respondents with highly responsive proposals for next steps.