

Material Safety Data Sheet

Agral 90

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Agral 90

Norac Concepts Inc.
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519-821-3633

Emergency telephone number: All hours, 613-787-5620, **ONLY** for health and environmental information.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients	% (w/w)	ACGIH TLV	CAS No.
Nonyl phenol ethoxylates	90 – 95	NA	68412-54-4
Isobutanol	5 – 10	150 mg/m ³	78-83-1

Synonyms: None known.

Chemical name: Nonyl phenol ethoxylate.

Product use: Agricultural non-ionic surfactant.

Registration number: 24725 Pest Control Products Act.

3. HAZARDS IDENTIFICATION

Summary: Hazardous properties of all ingredients have been considered in the preparation of this MSDS. Read the entire MSDS for the complete hazard evaluation of this product.

Physical Properties: Clear colourless liquid with a mild sweet odour.

Route of entry: Eyes, skin and inhalation.

Effects of acute exposure: May cause severe eye irritation. May cause irritation to the skin and the respiratory system.

Effects of chronic exposure: May aggravate pre-existing skin and respiratory conditions.

4. FIRST AID MEASURES

Inhalation: Move person to fresh air. Call 911 **IMMEDIATELY** for medical assistance. Give artificial respiration **ONLY** if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing **AND** no pulse.

Skin contact: Remove contaminated clothing immediately. Flush skin with running water for a minimum of 20 minutes. If irritation persists obtain medical attention.

Eye contact: Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. If irritation persists obtain medical attention.

Ingestion: Call 911 **IMMEDIATELY** for medical assistance. If person is alert and not convulsing, rinse mouth out and give 1 cup of water to dilute material. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in vomit, rinse mouth and administer more water.

Notes to Physician: There is no specific antidote, treat symptomatically

5. FIRE AND EXPLOSION HAZARD DATA

Flash point: > 45°C (TCC).

Autoignition temperature: No data.

Flammable limits (lower): 1.8%.

Flammable limits (upper): 10.6%.

Extinguishing media: For large fires, apply aqueous film forming foam or water in the form of a fog. For small fires, use carbon dioxide or dry chemical. Water stream may spread flames.

Fire fighting procedures: Wear self-contained breathing apparatus and impervious clothing. Minimize the amount of water used and contain the run-off from entering water supplies or the environment by dyking. Fire exposed containers should be kept cool by spraying with water to reduce pressure.

Other fire and explosion hazards: None known.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear personal protective equipment as described in Section 8.

Spills, leaks or releases: For release to land, stop any further release and spread of contamination and absorb spilled material with a suitable absorbent. Wash hard surfaces with detergent and water, then absorb with suitable absorbent. For release to water, stop any further release and utilize damming and/or water diversion to minimize the spread of contamination. Collect the spilled material, any contaminated soil, water and absorbent, then place in a waste container for proper disposal. Notify applicable government authority if release is reportable or could adversely affect the environment.

7. HANDLING AND STORAGE INFORMATION

Handling procedures: Use only with adequate ventilation and avoid contact with eyes, skin and clothing. Wear appropriate personal protective equipment. Wash thoroughly after use. If clothing becomes contaminated, wash thoroughly before re-use. Spilled material maybe slippery, clean up spills immediately before walking in spill area.

Storage requirements: Store in a cool, dry and well-ventilated area. Keep away from heat, sparks and flame. Keep containers closed. Keep out of reach of children and pets.

Storage temperature: Do not expose to temperatures above 40°C. Keep from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection: Chemical safety goggles.

Skin protection: Chemical resistant gloves and protective clothing should be impervious under conditions of use.

Respiratory protection: If misting conditions exist, use NIOSH/MSHA approved respirator for organic vapours.

Other protective equipment: None required.

Engineering controls: Provide local exhaust or ventilation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear colourless liquid.

Odour: Mild sweet odour.

Specific gravity: 1.03 at 25°C.

Boiling point: > 108°C.

Melting point: Not determined.

Solubility (water): Miscible.

Solubility (other): No data.

pH: 6.5 to 7.5.

% volatile: < 10%.

Evaporation rate (ether=1): Not determined.

Vapour pressure (mm Hg at 20°C): 10 mm Hg.

Vapour density (air=1): 2.55.

10. STABILITY AND REACTIVITY DATA

Chemical stability: Stable under normal conditions.

Hazardous polymerization: Will not occur.

Conditions to avoid: Sources of extreme heat or ignition and prolonged storage at temperatures above 40°C.

Incompatibility with other substances: Strong oxidizing agents.

Hazardous decomposition products: Oxides of carbon and possibly irritating gases.

11. TOXICOLOGICAL INFORMATION

Summary: May cause severe eye irritation. May cause irritation to the skin and the respiratory system.

Toxicological data

Isobutanol

Oral LD₅₀ (rat) = 2460 mg/kg

Dermal LD₅₀ (rabbit) = 4240 mg/kg

Inhalation LC₅₀ (rat) = 8000 ppm for 4hrs

Inhalation: Mists may cause irritation of the nose, throat and respiratory tract; may also cause coughing, sneezing and shortness of breath.

Skin contact: Prolonged and repeated exposure may cause irritation, redness, swelling and dermatitis.

Eye contact: May cause severe eye irritation. Can cause redness and tissue damage.

Ingestion: Low acute oral toxicity. May cause nausea, diarrhoea and abdominal cramps.

Chronic effects: Skin contact may aggravate pre-existing skin conditions. Inhalation of mists may aggravate pre-existing respiratory conditions.

Carcinogenicity: The ingredients in this product are not classified as carcinogenic by the ACGIH, IARC, OSHA and the NTP.

Mutagenicity: There is no evidence that this product has mutagenic potential.

Teratogenicity: There is no evidence that this product has teratogenic potential.

12. ECOLOGICAL INFORMATION

Ecotoxicological information: Harmful to aquatic life at low concentrations.

Environmental effects: Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers.

Persistence and degradation: Not known.

13. DISPOSAL CONSIDERATIONS

Container Disposal: Non-refillable container. Do not reuse. Triple rinse container and place rinse water into the spray tank. If available, offer for recycling or puncture and dispose of in a sanitary landfill, or by other procedures approved by provincial and local authorities.

Waste Disposal: Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local, provincial and federal regulations. Do not dispose of waste with normal garbage or to sewer systems.

14. TRANSPORT INFORMATION

TDG classification: Not regulated.

Transportation emergency telephone number: 613-787-5620.

15. REGULATORY INFORMATION

WHMIS classification: This product is registered under the *Pest Control Product Act* and is exempt from the requirements of WHMIS.

16. OTHER INFORMATION

The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and Norac Concepts Inc. will not be liable for any damages, losses, injuries or consequential damages which may result from the use of or reliance on any information contained herein. This material safety data sheet is valid for three years.

Prepared by: Norac Concepts Inc.