

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Identification    Product Name: NuSolv KDS 2  
Product Number: SCZ390                      CAS Number: Blend

## Company Identification

NuGeneration Technologies, LLC

[www.nugentec.com](http://www.nugentec.com)

100 Professional Center Drive, Rohnert Park, CA 94928

(707) 820-4080 (For product information)

1-800-424-9300 or 1-202-483-7616 (CHEMTREC: For emergencies)

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

100.0% NuSolv KDS2 CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS

<u>Chemical Name</u>	<u>Amount</u>	<u>CAS Number</u>
N-METHYLPYRROLIDONE	< 75.0 %	872-50-4
POTASSIUM HYDROXIDE	< 5.0 %	1310-58-3
METHANOL	<15.0%	67-56-1

## NON-HAZARDOUS COMPONENTS

<u>Chemical Name</u>	<u>Amount</u>	<u>CAS Number</u>
NONIONIC SURFACTANT	< 3.0 %	68603-25-8

Balance Non-regulated Materials and DI Grade water.

(See Section 8 for exposure guidelines)    (See Section 15 for regulatory information)

## HAZARDS DISCLOSURE

This product contains hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

As defined under Sara 311 and 312, this product contains known hazardous materials.

**3. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW  
WARNING!**

Corrosive material. Avoid eye contact. Can cause skin and eye irritation or burns.

HMIS Rating -            Health: 2  
                                  Flammability: 1  
                                  Reactivity: 0  
                                  Personal Protection Index: C

NFPA Rating -            Health: 2  
                                  Flammability: 1  
                                  Reactivity: 0  
                                  Special Hazard: None

NFPA/HMIS Definitions: (0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme). These values are obtained using the guidelines or published evaluations prepared by the national Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

## POTENTIAL HEALTH EFFECTS

EYE: Contact causes severe eye irritation and or burns.

SKIN: Can cause severe injury (reddening and swelling).

INHALATION: Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

INGESTION: May be harmful if swallowed. Irritating to mouth, throat, and stomach.

SIGNS AND SYMPTOMS OF EXPOSURE: If exposed areas are flushed promptly and thoroughly with water, there should be little or no harm. Long-term exposure may lead to rash or burn.

CARCINOGENICITY INFORMATION: No known cancer hazards.

MISCELLANEOUS: Solutions extremely slippery when spilled.

**4. FIRST AID MEASURES**

**EYE CONTACT FIRST AID:** Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes.

Get medical attention if irritation develops or persists.

**SKIN CONTACT FIRST AID:** Immediately wash skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

**INHALATION FIRST AID:** Although this product is not known to cause respiratory problems, if breathing is difficult, remove to fresh air and provide oxygen. Get medical attention if cough or other symptoms develop. Remove from area of exposure. Seek immediate medical attention if respiratory irritation or distress continues.

**INGESTION FIRST AID:** Give milk or water. Do not induce vomiting. Get medical attention immediately.

**STATEMENT OF PRACTICAL TREATMENT:** Always have plenty of water available for first aid.

**NOTES TO PHYSICIAN:** Treat patient symptomatically.

**5. FIRE FIGHTING MEASURES**

**FLAMMABLE PROPERTIES** Autoignition Temperature: <250 F

COC Flash Point: >185 F TCC Flash Point: not determined

**FLAMMABLE LIMITS IN AIR** LEL: not determined UEL: not determined

**EXTINGUISHING MEDIA:** water, dry chemical, foam.

**FIRE & EXPLOSION HAZARDS:** may form dark dense smoke.

**FIRE FIGHTING INSTRUCTIONS:** Contaminated extinguishing water must be disposed of in accordance with applicable regulations.

**6. ACCIDENTAL RELEASE MEASURES**

**SAFEGUARDS (PERSONNEL):** Protect skin and eyes from exposure. Wear appropriate personal protective equipment.

**INITIAL CONTAINMENT:** Floor may become slippery. Contain spilled material. Wash area to prevent slipping. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

**LARGE SPILLS PROCEDURE:** Forms smooth, slippery surfaces on floors, posing an accident risk. Clean up spills immediately, observing precautions in Protective Equipment section. Neutralize spill with a weak acid such as vinegar or acetic acid. Flush spill area with water to wastewater treatment system. After removal, flush contaminated area thoroughly with water. Or, absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container and dispose of in an approved sanitary landfill. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

**SMALL SPILLS PROCEDURE:** Floor may become slippery. Wash with water or absorb spills with inert material. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

**7. HANDLING AND STORAGE**

**RECOMMENDED STORAGE TEMPERATURE**

Minimum: 4.4 C (39.9 F) Maximum: 48.9 C (120.0 F)

**HANDLING (PERSONNEL):** Avoid contact with eyes, skin, and clothing. Empty drums should be completely drained (triple rinsed), properly bunged, and promptly returned to a drum re-conditioner, or properly disposed of. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

**HANDLING (PHYSICAL ASPECTS):** Keep container closed to avoid contamination.

**STORAGE PRECAUTIONS:** Store in a cool dry place. Do not stack drums more than three pallets high. Store in a tightly closed container.

**MISCELLANEOUS:** Do not stack over two pallets high.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Good general ventilation should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**EYE / FACE PROTECTION REQUIREMENTS:** When splashing of the material may occur, chemical goggles and a face shield are recommended.

SKIN PROTECTION REQUIREMENTS: Wear protective gloves to minimize skin contact. Nitrile rubber and PVC are suitable protective materials; Neoprene is recommended. Wash hands thoroughly after handling.

RESPIRATORY PROTECTION REQUIREMENTS: Under normal use conditions, with adequate ventilation, no special handling equipment is required. At elevated temperatures, > 110 F, ventilation is required.

MISCELLANEOUS: Where an apron and protective clothing.

EXPOSURE GUIDELINES:

## 9. PHYSICAL AND CHEMICAL PROPERTIES

FORM .....: Liquid  
COLOR .....: Brown  
ODOR .....: Mild, sweet odor  
BOILING POINT .....: >212 F  
SOLUBILITY IN WATER .....: Complete  
SPECIFIC GRAVITY .....: 0.913 (Water = 1)  
BULK DENSITY .....: 7.6  
MELTING/FREEZING POINT .....: 15 F  
PH .....: 13  
% VOLATILES .....: 95  
PH (5% B.V.) .....: 12

## 10. STABILITY AND REACTIVITY

STABILITY: Stable.

POLYMERIZATION: Hazardous polymerization will not occur.

INCOMPATIBILITY WITH OTHER MATERIALS: May react with acidic materials. May corrode copper, aluminum, zinc, and their alloys.

DECOMPOSITION: Decomposition will not occur if handled and stored properly. Product may decompose at temperatures above 270°C and release carbon, nitrogen or oxides.

CONDITIONS TO AVOID: This material is safe under normal storage and handling conditions. Avoid contact with this material and copper, aluminum, zinc, and their alloys.

## 11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: Can cause severe eye irritation.

SKIN EFFECTS: Contact may cause skin irritation.

ACUTE ORAL EFFECTS: No known hazards in normal industrial use.

ACUTE INHALATION EFFECTS: May be irritating if inhaled.

## 12. ECOLOGICAL INFORMATION

No information available.

## 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Uncleaned empty containers should be disposed of in the same manner as the contents. Dilute or neutralize with acid and discharge to an industrial sewage treatment facility. Or bury in an approved sanitary landfill. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements. For additional waste disposal information contact your local NuGenTec representative at (888) 99-NuGen.

CONTAMINATED MATERIALS: Wash contaminated clothing before reuse.

CONTAINER DISPOSAL: Containers should be triple rinsed prior to disposal.

**14. TRANSPORTATION INFORMATION**

PRODUCT LABEL.....: NuSolv KDS2  
D.O.T. SHIPPING NAME.....: Corrosive Liquid  
TECHNICAL SHIPPING NAME.....: Corrosive Liquid (potassium hydroxide mixture) 1760, 8, PG III  
D.O.T. HAZARD CLASS.....: 8  
UN NUMBER.....: 1760  
PRODUCT RQ (lbs).....: 10,000  
PACKAGE CLASS.....: 55  
MISCELLANEOUS: Export Classification, organic surface active agents (other than soap), washing preparations and cleaning preparations, schedule B # 3402.90.5030.

**15. REGULATORY INFORMATION**

R-Phrases:  
R36/38 - Irritating to eyes and skin.  
S-Phrases:  
S24/25 - Avoid contact with skin and eyes.  
Canadian Disclosure List

SARA Title III - Section 313

CERCLA Hazardous Substances None

**MISCELLANEOUS INFORMATION:**

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA). This material or all of its components are listed on the Canadian Domestic Substances List (DSL). This material or all of its components are listed (or considered as having been notified) on the European Inventory of Existing Chemical Substances (EINECS).

**16. OTHER INFORMATION**

Prepared By.....: Donato Polignone  
Approval Date.....: May 19, 2007  
Supersedes Date...: June 15, 2006 (SCZ382)  
PRD Number.....: SCZ390 (Official Copy)

**ADDITIONAL INFORMATION:**

The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process.

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of NuGeneration Technologies, LLC. The data on this sheet are related only to the specific material designated herein. NuGeneration Technologies, LLC assumes no legal responsibility for use or reliance upon these data.

END OF MSDS