MATERIAL SAFETY DATA SHEET

Printed on : 08/01/14 **Document Reference : MS-KNVGII-AN**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : **norovirusGII@ceeramTools**
CATALOG NUMBER : **KNVGII**
MANUFACTURER/SUPPLIER : **CEERAM SAS,**
1 ALLEE DE LA FILEE,
44240 LA CHAPELLE SUR ERDRE, FRANCE
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contact@ceeram.com

2. HAZARDS IDENTIFICATION

Xi : Irritant
Xn : Harmful

T : Toxic

N : Dangerous for Environment

R-phrase(s)

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R25 Toxic if swallowed
R36/37/38 Irritating to eyes, respiratory system and skin.
R52 Harmful to aquatic organisms.

S-phrase(s)

S24/25 Avoid any inhalation, contact with skin and eyes. Wear suitable protective clothing and gloves.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36 Wear suitable protective clothing.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS-N°	EC-N°	Weight %	Classification
Tris Base	77-86-1	201-064-4	1-10%	Xi R36/38
Glycerol	56-81-5	200-289-5	10-60%	Xi R36/37/38
Octylphenylpoly ethylene glycol	9002-93-1	-	1-10%	Xi R25, R36/38
Ethylene oxide (impurity)	75-21-8	200-849	< 0,01%	Xi R25, R36/38
Water	7732-18-5	215-185-5	20-80%	R36/38
EDTA	6381-92-6	205-358-3	1-10%	Xn Xi R36/37/38 R20/21/22, R52

4. FIRST-AID MEASURES

Eye contact : Flush immediately with large amounts of clean water for a minimum of 15 minutes, lifting upper and lower lids occasionally. Seek medical advice immediately.

Inhalation : Seek medical attention immediately. Move the person to fresh air immediately. If symptoms persist, proceed with artificial respiration.

Skin contact : Rinse area with soap and water. Seek medical attention immediately. Change and wash your clothes before using them again.

Ingestion : If swallowed, do not induce vomiting: seek medical advice immediately. Rinse the mouth with water. Never administrate anything to an unconscious person.

Note to physician : You must take contact with the nearest poison centre.

5. FIRE-FIGHTING MEASURES

Extinguishing Methods : Water
Powder
Powdered Chemical product
Carbon dioxide (CO_2)
Use any means suitable for extinguishing surrounding fire.

Dangerous products of decomposition : Carbon oxides, nitrogen oxides (NOx)

Personal Protective Equipment : Use protective clothing and breathing equipment appropriate for the surrounding fire. If necessary use appropriate respiratory mask.

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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions : Ensure appropriate air renewal. Avoid skin, eye and clothes contact. Avoid breathing gas, fumes, vapors, sprays.

Precaution for the protection of the environment : Prevent material from entering public sewer systems or any waterways.

Cleanup Methods : Clean up uncontaminated material and recycle into process. Place unusable material into a dry, closed, labeled container compatible with the product and in accordance to the national/local legislation.

7. HANDLING AND STORAGE

Risk-free Handling Precautions : Handle with usual and adapted hygienic precautions, respecting the security. Wear adapted Personal Protecting Equipment. Ensure sufficient ventilation.

Storage Conditions : Check the label on the product for the storage indications. Keep in the original Packaging. Keep away from direct light.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Values :

Components	UE OEL (TWA)	UE OEL (STEL)	UE skin notation	France OEL (VME)
Octylphenyl-polyethylene glycol	No data available	No data available	No data available	No data available
Ethylene oxide (impurity)	No data available	No data available	No data available	No data available
Glycerol	No data available	No data available	No data available	10 mg/m3

Components	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Octylphenyl-polyethylene glycol	No data available	No data available	No data available	No data available
Ethylene oxide (impurity)	1 ppm	No data available	No data available	No data available

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Components	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Glycerol	15 mg/m3 total 5 mg/m3	No data available	No data available	No data available

Eye Protection : Glasses or goggles with lateral protection. An eyewash and safety shower should be nearby and ready for use.

Hand Protection : Wear adapted single use gloves. Verify indications from the gloves manufacturer.

Respiratory Protection : Provide sufficient ventilation. Avoid vapors, fumes and gas.

Skin Protection : Adapted protection is needed.

Engineering Controls : Well-ventilated area must be provided at all times.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Liquid Form
Color : This information is not available.
Smell : This information is not available
pH : This information is not available
Ebullition Point : This information is not available
Fusion Point : This information is not available.
Solubility in Water : This information is not available.
Ignition Point : This information is not available.
Explosion Limit : This information is not available.
Density : This information is not available.
% Volatility : This information is not available.

10. STABILITY AND REACTIVITY

Materials to be avoided : Strong acids, oxidizing agents, anhydric acid, bases, isocyanates, ammoniac, ammonium, aluminum, copper

Conditions to be avoided : Heat, ignition sources

Decomposition Products : Carbon oxides, nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

Components	LD50 oral (rat/mouse)	LD50 dermal (rat/rabbit)	LC50 inhalation (rat/mouse)
Octylphenyl-polyethylene glycol	1800 mg/kg	No data available	No data available

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Components	LD50 oral (rat/mouse)	LD50 dermal (rat/rabbit)	LC50 inhalation (rat/mouse)
Ethylene oxide	72 mg/kg	No data available	No data available
Glycerol	12600 mg/kg	No data available	No data available
Tris Base	5900 mg/kg	No data available	No data available
EDTA	No data available	No data available	No data available

12. ECOLOGICAL INFORMATION

We have no quantitative data concerning the ecological effects of this product.
An environmental hazard can not be excluded in the event of unprofessional handling or disposal.

Components	Water Flea data (Daphnia magna)	Log Pow
Octylphenyl-polyethylene glycol	No data available	No data available
Ethylene oxide	Daphnia magna LC50137 - 300 mg/L (24h)	logPow-0.3
Glycerol	Daphnia magna EC50 > 500 mg/L (24h)	logPow-1.76
Tris Base	No data available	No data available
EDTA	No data available	No data available

13. DISPOSAL CONSIDERATIONS

Precautions for the protection of the environment : Prevent material from entering public sewer systems or any waterways.

Waste Treatment : Spilled product should be disposed of in an EPA approved disposal facility in accordance with applicable national, state and local environmental laws and regulations.

Other information : This product must be disposed of as a laboratory chemical product in accordance with local regulations.

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14. TRANSPORT INFORMATION

IATA-DGR :	Not a regulated hazardous material
IMDG :	Not a regulated hazardous material
ADR :	Not a regulated hazardous material

15. REGULATION INFORMATION

Status in the National Inventory - European Union

European Inventory of Existing Commercial Chemical Substances (EINECS) :
All components of this product have been reported to be on the Inventory or have been removed from it.

European List of Notified Chemical Substances (ELINCS) :
All components of this product have been reported to be on the Inventory or have been removed from it.

European List of No-Longer Polymers (NLP) :
All components of this product have been reported to be on the Inventory or have been removed from it.

Components	TSCA
Octylphenyl-polyethylene glycol 9002-93-1 (1-10)	Listed
Ethylene oxide (impurity) 75-21-8 (< 0.0,1%)	Listed
Glycerol 56-81-5 (10-30)	Listed

U.S. Federal Regulations

SARA 313
This product contains the following toxic chemical(s) subject to the notification requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986. This law requires certain manufacturers to report on annual emissions of specified chemicals and chemical categories. Please note that if you repackage, or otherwise redistribute, this product to industrial customers, a notice similar to this one should be sent to those customers :

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
Ethylene oxide (impurity)	75-21-8	<0.01%	0.1

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product contains the following HAPs:

Component	CAS-No	Weight %	HAPS data
Ethylene oxide (impurity)	75-21-8 (<0.01%)	<0.01%	Present

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U.S. State Regulations

Components	Massachussetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
Octylphenyl-polyethylene glycol	-	-	-	-	-
Ethylene oxide (impurity)	Listed	Listed	Listed	Listed	Listed
Glycerol	Listed	-	Listed	-	Listed

California Proposition 65

This product contain chemicals listed under Proposition 65 chemicals :

Component	CAS-No	Weight %	Category
Ethylene oxide (impurity) 75-21-8	75-21-8 (<0.01%)	<0.01%	Carcinogen

WHMIS Hazard Class

Non-controlled

16. OTHER INFORMATION

The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations or mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment.

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