

Material Safety Data Sheet

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1. PRODUCT IDENTIFICATION

Product name : **FluorN 562**

Product Use Description : Fluorosurfactant. Wetting and leveling agent.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component: Poly(propylene glycol) bis[(1,3,3 tri-methyl, 1 (methoxy-poly(ethylene glycol))urethane, 5 (2-perfluoroalkyl ethanol)urethane)-isophorone]

CAS Number: 1006713-73-0

Concentration: 100%

Chemical Family: Fluorinated Urethane Glycol

3. HAZARDS IDENTIFICATION

Emergency Overview: Mild respiratory irritant. Mild skin irritant. Mild eye irritant. May cause sensitization by skin contact.

Potential Health Effects:

Inhalation : May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

Eye contact : Contact with eyes may cause irritation.

Skin contact : Causes skin irritation.

Chronic Health Hazard : This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater.

Exposure Guidelines:

Target Organs : Respiratory system,

Symptoms : Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat.

Aggravated Medical Condition: Asthma. Skin disorders and Allergies.

4. FIRST AID MEASURES

General advice Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Eye contact: Rinse immediately with plenty of water also under the eyelids for at least 20 minutes. Remove contact lenses.

Skin contact: Wash off immediately with plenty of water for at least 20 minutes. Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately. NOTE TO

PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

Ingestion: Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Prevent aspiration of vomit. Turn victim's head to the side.

Inhalation: If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

5. FIRE- FIGHTING MEASURES

Suitable extinguishing media: Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemical. Dry sand. Limestone powder.

Specific hazards: Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces noxious and toxic fumes.

Special protective equipment for fire-fighters: Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

Further information: Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

Environmental precautions: Construct a dike to prevent spreading.

Methods for cleaning up: Clean up with detergent and water.

Additional advice: Open enclosed spaces to outside atmosphere. If possible, stop flow of product.

7. HANDLING AND STORAGE

Handling: Do not use air pressure to remove contents. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid breathing vapors and/or aerosols. Avoid contact with eyes. Use only in well ventilated areas. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage: Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures:

Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Personal protective equipment

Respiratory protection : Wear appropriate respirator when ventilation is inadequate.

Hand protection : Loose fitting thermal insulated or leather gloves.

Impervious gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.

Eye protection: Full face shield with goggles underneath when molten material is being handled. Chemical safety glasses.

Skin and body protection: Long sleeve shirts and trousers without cuffs.

Environmental exposure controls: Construct a dike to prevent spreading.

Special instructions for protection and hygiene: Provide readily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Viscous liquid.

Color: Light amber.

Odor: Slight halogen.

Relative density: ~1.1

Vapor pressure : NA

Boiling point/range: ND

Flash point : > 200 °C

Viscosity : ND

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions.

Materials to avoid: Oxidizing agents. Alkali metals.

Hazardous decomposition: Products at temperature above 250°C: HF, Cyanic acids, Cyanogen, Nitrile, Toxic cyanates., Carbon monoxide, Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Acute Health Hazard:

Ingestion: No data is available for this product itself.

Inhalation: No data is available for this product itself.

Skin: No data is available for this product itself.

Eye irritation/corrosion: Mild eye irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects:

Aquatic toxicity: No data is available on the product itself.

Toxicity to other organisms: No data is available on the product itself.

Persistence and degradability:

Mobility: No data is available on the product itself.

Bioaccumulation: No data is available on the product itself.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused

products: Contact supplier if guidance is required.

Contaminated packaging: Dispose of container and unused contents in accordance with federal, state, and local requirements.

14. TRANSPORT INFORMATION

CFR

not regulated

IATA

not regulated

IMDG

not regulated

CTC

not regulated

Further Information:

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

OSHA: Hazard Communication Standard (29 CFR 1910.1200) Hazard Class(es) Irritant. Sensitizer.

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification: None.

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level: None.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65): This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

WHMIS Hazard Classification: None

16. OTHER INFORMATION

HMIS Rating:

Health: 1

Flammability: 1

Physical hazard: 1