

Safety Data Sheet



1. Identification

Product Name: NANO 8-OZ 12 PK SHIELD HARDENER **Revision Date:** 7/22/2015
Product Identifier: 137195 **Supercedes Date:** New SDS
Product Use/Class: Additive
Supplier: Rust-Oleum Corporation
 11 Hawthorn Parkway
 Vernon Hills, IL 60061
 USA **Manufacturer:** Rust-Oleum Corporation
 11 Hawthorn Parkway
 Vernon Hills, IL 60061
 USA
Preparer: Regulatory Department
Emergency Telephone: 24 Hour Hotline: 847-367-7700

2. Hazard Identification

Classification

Symbol(s) of Product



Signal Word

Warning

Possible Hazards

52% of the mixture consists of ingredient(s) of unknown acute toxicity.

GHS HAZARD STATEMENTS

Flammable liquid, category 4 H227 Combustible liquid
 Acute Toxicity, Inhalation, category 4 H332 Harmful if inhaled.

GHS LABEL PRECAUTIONARY STATEMENTS

P261 Avoid breathing dust, fumes, gases, mists, vapors, or spray.
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

| <u>Chemical Name</u> | <u>CAS-No.</u> | <u>Wt.% Range</u> | <u>GHS Symbols</u> | <u>GHS Statements</u> |
|--|----------------|-------------------|--------------------|----------------------------------|
| Hexamethylene Diisocyanate Polymer | 28182-81-2 | 25-50 | GHS07 | H332 |
| 3-Methoxybutyl Acetate | 4435-53-4 | 25-50 | No Information | No Information |
| Homopolymer of IPDI | 53880-05-0 | 10-25 | No Information | No Information |
| Polyethylene glycol tridecyl ether phosphate | 9046-01-9 | 2.5-10 | No Information | No Information |
| N,N-Dimethylcyclohexylamine | 98-94-2 | 1.0-2.5 | GHS06 | H301-330 |
| Hexamethylene Diisocyanate | 822-06-0 | 0.1-1.0 | GHS06-GHS08 | H302-311-315-317-319-330-334-335 |

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: If swallowed, get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may explode when exposed to extreme heat due to buildup of steam. Keep containers tightly closed. Combustible liquid and vapor. No unusual fire or explosion hazards noted.

SPECIAL FIREFIGHTING PROCEDURES: Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class II combustible liquids. Avoid excess heat.

8. Exposure Controls/Personal Protection

| Chemical Name | CAS-No. | Weight % Less Than | ACGIH TLV- TWA | ACGIH TLV- STEL | OSHA PEL-TWA | OSHA PEL- CEILING |
|--|------------|-----------------------|-------------------|--------------------|--------------|----------------------|
| Hexamethylene Diisocyanate Polymer | 28182-81-2 | 50.0 | N.E. | N.E. | N.E. | N.E. |
| 3-Methoxybutyl Acetate | 4435-53-4 | 30.0 | N.E. | N.E. | N.E. | N.E. |
| Homopolymer of IPDI | 53880-05-0 | 20.0 | N.E. | N.E. | N.E. | N.E. |
| Polyethylene glycol tridecyl ether phosphate | 9046-01-9 | 10.0 | N.E. | N.E. | N.E. | N.E. |
| N,N-Dimethylcyclohexylamine | 98-94-2 | 5.0 | N.E. | N.E. | N.E. | N.E. |
| Hexamethylene Diisocyanate | 822-06-0 | 1.0 | 0.005 ppm | N.E. | N.E. | N.E. |
| Isophorone Diisocyanate | 4098-71-9 | 1.0 | 0.005 ppm | N.E. | N.E. | N.E. |

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

| | | | |
|---------------------------------|---------------------|---|-------------|
| Appearance: | Liquid | Physical State: | Liquid |
| Odor: | Solvent Like | Odor Threshold: | N.E. |
| Relative Density: | 1.081 | pH: | N.A. |
| Freeze Point, °C: | N.D. | Viscosity: | N.D. |
| Solubility in Water: | Slight | Partition Coefficient, n-octanol/ water: | N.D. |
| Decomposition Temp., °C: | N.D. | Explosive Limits, vol%: | N.A. - N.A. |
| Boiling Range, °C: | 101 - 537 | Flash Point, °C: | 76 |
| Flammability: | Supports Combustion | Auto-ignition Temp., °C: | N.D. |
| Evaporation Rate: | Slower than Ether | Vapor Pressure: | N.D. |
| Vapor Density: | Heavier than Air | | |

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures above 120°F (49°C). Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalis.

HAZARDOUS DECOMPOSITION: When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Substance causes moderate eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Causes skin irritation. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation. May cause allergic respiratory reaction.

EFFECTS OF OVEREXPOSURE - INGESTION: Irritating to the nose, throat and respiratory tract. Harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Overexposure may cause lung damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>Oral LD50</u> | <u>Dermal LD50</u> | <u>Vapor LC50</u> |
|----------------|------------------------------------|------------------|--------------------|-------------------|
| 28182-81-2 | Hexamethylene Diisocyanate Polymer | N.I. | N.I. | 18.5 mg/L Rat |
| 4435-53-4 | 3-Methoxybutyl Acetate | 4210 mg/kg Rat | N.I. | N.I. |
| 98-94-2 | N,N-Dimethylcyclohexylamine | 272 mg/kg Rat | N.I. | 1.9 mg/L Rat |
| 822-06-0 | Hexamethylene Diisocyanate | 710 mg/kg Rat | 593 mg/kg Rabbit | 0.15 mg/L Rat |
| 4098-71-9 | Isophorone Diisocyanate | 1270 mg/kg Rat | 4780 mg/kg Rabbit | N.I. |

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information

| | <u>Domestic (USDOT)</u> | <u>International (IMDG)</u> | <u>Air (IATA)</u> | <u>TDG (Canada)</u> |
|-----------------------|-------------------------|-----------------------------|-------------------|---------------------|
| UN Number: | N.A. | N.A. | N.A. | N.A. |
| Proper Shipping Name: | Not Regulated | Not Regulated | Not Regulated | Not Regulated |
| Hazard Class: | N.A. | N.A. | N.A. | N.A. |
| Packing Group: | N.A. | N.A. | N.A. | N.A. |
| Limited Quantity: | No | No | No | No |

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Reactive Hazard, Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------------|----------------|
| Hexamethylene Diisocyanate | 822-06-0 |
| Isophorone Diisocyanate | 4098-71-9 |

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information

HMIS RATINGS

Health: 2* Flammability: 2 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 2 Instability: 0

VOLATILE ORGANIC COMPOUNDS, g/L: 324

SDS REVISION DATE: 7/22/2015

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.