



SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements.

Occupational Safety and Health Administration

Form Approved

OMB No. 1218-0072

Product Name: REFINE-MAXX WET POLISHING GROUT PART A

Section I

SDS Provided By: Jon-Don
Address: 400 Medinah Road Roselle, IL. 60172

Telephone Number

Information: 800-556-6366

Date Prepared: 02/05/2018

SECTION II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
65997-15-1 Portland Cement	5.0mg/m ³	10.0 mg/m ³		
14808-60-7 Silica or Natural Sand	0.1mg/m ³	0.01mg/m ³		

NIOSH RECOMMENDS – A permissible exposure limit or 50micrograms respirable free silica per cubic meter of air Averaged over a normal work week of 40 hours

SECTION III-Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H2O = 1)	2.9-3.10
Vapor Pressure (mm Hg)	N/A	Melting Point	>1,000° C
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A

Solubility in Water: Negligible

Appearance and Odor: Gray appearance-no odor

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
N/A	N/A	N/A	N/A

Extinguishing Media: Use an extinguishing agent suitable for the surrounding fire.

Special Fire Fighting Procedures: Non-combustible; non-explosive

Unusual Fire and Explosion Hazards: N/A

(Reproduce locally) OSHA 174 Sept. 1985

SECTION V - Reactivity Data

Stability

- Unstable
 Stable

Conditions to Avoid

Incompatibility (Materials to Avoid): Not incompatible with most materials

Hazardous Decomposition or Byproducts

Hazardous Polymerization

- May Occur
 Will Not Occur

Conditions to Avoid

Upon direct contact with water, material will harden

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation? YES Skin? YES Ingestion? YES

Health Hazards (Acute and Chronic): MSHA & OSHA Classification as nuisance dust

Carcinogenicity NTP? YES IARC Monographs? YES OSHA Regulated? NO

Signs and Symptoms of Exposure: Skin dryness, alkali burns, nuisance resulting in eye & respiratory systems, shortness of breath, reduced pulmonary function.

Medical Conditions Generally Aggravated by Exposure: Those with sensitive skin or with pulmonary/respiratory disease such as asthma & bronchitis should be precluded from exposure.

Emergency and First Aid Procedures: Repeatedly flood eyes with clean water. Exposed skin areas should be washed with soap & water; for inhalation get fresh air. Get medical attention

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled: With adequate ventilation, clean-up with as little dust as possible and place into a closed container for disposal or use.

Waste Disposal Method: In accordance with Federal, State and Local Regulations may be treated as common waste.

Precautions to Be Taken in Handling and Storing: In accordance with Federal, State and Local Regulations may be treated as common waste.

Other Precautions: Keep dry whenever possible

Section VII - Control Measures

Respiratory Protection (Specify Type): NIOSH, MSHA or OSHA approved respirator

Ventilation: Local Exhaust to control dust if necessary Special Mechanical (General) Other

Protective Gloves: Recommended

Eye Protection: Recommended

Other Protective Clothing or Equipment: Use impermeable protective clothing. Prevent skin contact with contaminated clothing.

Work/Hygienic Practices: Wash clothing before re-use. Thoroughly clean contaminated clothing.

SECTION 1 - IDENTIFICATION

SDS PROVIDER: JON-DON
Address: 400 MEDINAH ROAD ROSELLE, IL. 60172
Telephone: 800-556-6366

Trade Name WET POLISHING GROUT PART B
Recommended and Restricted Uses Coatings product

SECTION 2 – HAZARD(S) IDENTIFICATION

Hazard classification: GHS classification in accordance with 29 CFR 1910.1200 not a hazardous substance or mixture.
Other hazards: No data available.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Acrylic emulsion. This product is a mixture.		
Component	CASRN	Concentration
Acrylic polymer(s)	Not hazardous	46.0 - 47.0 %
Residual monomers	Not required	< 0.05 %
Aqua ammonia	1336-21-6	0.2 0/0
Diphenyl Ketone	119-61-9	0.1 0.2%
Water	7732-18-5	53.0 - 54.0%

SECTION 4 - FIRST-AID MEASURES

Description of first aid measures

Inhalation: Move to fresh air.
Skin contact: Wash with water and soap as a precaution. If skin irritation persists, call a physician.
Ingestion: Drink 1 or 2 glasses of water. Consult a physician if necessary. Never give anything by mouth to an unconscious person.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 1 1: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Notes to physician: Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

SECTION 5 - FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media: No data available

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Hazardous combustion products: No data available
Unusual fire and explosion hazards: Material can splatter above 100C/212F. Dried product can burn.

ADVICE FOR FIREFIGHTERS

Fire Fighting Procedures: No data available
Special protective equipment for firefighters: Wear self-contained breathing apparatus and protective suit.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Keep people away from and upwind of spill/leak. Material can create slippery conditions.
Environmental precautions: CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.
Methods and materials for containment and cleaning up: Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

SECTION 7 - STORAGE AND HANDLING

Precautions for safe handling: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container tightly closed. Do not breathe vapors, mist or gas.
Conditions for safe storage: Keep from freezing - product stability may be affected. STIR WELL BEFORE USE.

STORAGE STABILITY

Storage temperature: 1 - 49°C (34 - 120°F)

Other data: Monomer vapors can be evolved when material is heated during processing operations. See SECTION 8, for types of ventilation required,

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value/Notation
Residual monomers	Dow II-IG	TWA	4 ppm
	Dow II-IG	TWA	SKIN
	Dow IHG	STEL	10 ppm
	Dow IHG	STEL	SKIN
Aqua ammonia	ACGIH	TWA	20 ppm
	Dow IHG	TWA	10 ppm
	Dow IHG	STEL	30 ppm
	OSHA Z-1	TWA	35 mg/m3 50 ppm

	ACGIH	TWA	25 ppm, Ammonia
	ACGIH	STEL	35 ppm, Ammonia
Diphenyl Ketone	US WEEL	TWA	0.5 mg/m3

EXPOSURE CONTROLS:

Engineering controls: Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Protective measures: Facilities storing or utilizing this material should be equipped with an eyewash facility.

INDIVIDUAL PROTECTION MEASURES:

Eye/face protection: Safety glasses with side-shields Eye protection worn must be compatible with respiratory protection system employed

Skin protection/Hand protection: The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection):
Neoprene gloves

Respiratory protection: A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. For airborne concentrations up to 10 times the exposure limit, wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) ammonia/methylamine cartridges and N95 filters. If oil mist is present, use R95 or P95 filters.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid	Relative Vapor Density: (air = 1)	<1.0000 Water
Color:	White milky	Relative Density (water=1)	1.0000 - 1.2000
Odor:	Ammonia	Water Solubility	Dilutable
pH:	9.0 - 10.0	Partition coefficient: noctanol/water	No data available
Melting Point:	No data available	Auto-ignition temperature	No data available
Freezing Point:	0.00°C (32.00°F) Water	Decomposition temperature	No data available
Boiling Point (760 mmHg):	100.00°C (212.00°F) Water	Dynamic Viscosity	No data available
Flash Point:	Noncombustible	Kinematic Viscosity	No data available
Evaporation Rate: (Butyl Acetate)	<1.00 Water	Explosive properties	No data available
Flammability	Not Applicable	Oxidizing properties	No data available
Upper Explosion Limit:	Not Applicable	Molecular weight	No data available
Vapor Pressure:	17.0000000 mmHg at 20.00°C (68.00°F) Water	Percent volatility	53.00 - 54.00 0/0 Water

NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10 - STABILITY AND REACTIVITY

Chemical reactivity:	No data available
Chemical stability:	No data available
Possibility of hazardous reaction:	Not available.
Product will not undergo polymerization. Stable	
Conditions to avoid:	No data available
Incompatible materials:	There are no known materials which are incompatible with this product.
Hazardous decomposition products:	Thermal decomposition may yield acrylic monomers.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity:	Acute oral toxicity LD50, Rat, > 5,000 mg/kg Acute dermal toxicity LD50, Rabbit, > 5,000 mg/kg Acute inhalation toxicity Acute toxicity estimate, 4 Hour, vapor, > 40 mg/l Calculation method
Skin corrosion/irritation:	May cause transient irritation.
Serious eye damage/eye irritation:	No eye irritation.
Sensitization:	Product test data not available. Refer to component data.
Specific Target Organ Systemic Toxicity (Single Exposure):	Product test data not available. Refer to component data.
Specific Target Organ Systemic Toxicity (Repeated Exposure):	Product test data not available. Refer to component data.
Carcinogenicity:	Product test data not available. Refer to component data.
Teratogenicity:	Product test data not available. Refer to component data.
Reproductive toxicity:	Product test data not available. Refer to component data.
Mutagenicity:	Product test data not available. Refer to component data.
Aspiration Hazard:	Product test data not available. Refer to component data.
Additional information	No data are available for this material. The information shown is based on profiles of compositionally similar materials.

COMPONENTS INFLUENCING TOXICOLOGY:**ACRYLIC POLYMER(S)****Sensitization**

For skin sensitization:	No relevant data found.
For respiratory sensitization:	No relevant data found.
Specific Target Organ Systemic Toxicity (Single Exposure):	The substance or mixture is not classified as specific target organ toxicant, single exposure.
Specific Target Organ Systemic Toxicity (Repeated Exposure):	No relevant data found.
Carcinogenicity:	No relevant data found.

Teratogenicity:	No relevant data found.
Reproductive toxicity:	No relevant data found.
Mutagenicity:	No relevant data found.
Aspiration Hazard:	No aspiration toxicity classification.
<u>RESIDUAL MONOMERS</u>	
Sensitization	
For skin sensitization:	Did not cause allergic skin reactions when tested in guinea pigs. Did not cause allergic skin reactions when tested in humans.
For respiratory sensitization:	No relevant data found.
Specific Target Organ Systemic Toxicity (Single Exposure):	May cause respiratory irritation.
Route of Exposure:	Inhalation
Target Organs:	Respiratory Tract
Specific Target Organ Systemic Toxicity (Repeated Exposure):	Repeated excessive exposures may cause Respiratory effects.
Carcinogenicity:	Did not cause cancer in laboratory animals.
Teratogenicity:	Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.
Reproductive toxicity:	In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.
Mutagenicity:	In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.
Aspiration Hazard:	Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.
<u>AQUA AMMONIA</u>	
Sensitization	
For skin sensitization:	No relevant data found.
For respiratory sensitization:	No relevant data found.
Specific Target Organ Systemic Toxicity (Repeated Exposure):	Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Carcinogenicity:	Did not cause cancer in laboratory animals.
Teratogenicity:	Available data are inadequate for evaluation of potential to cause fetotoxicity.
Reproductive toxicity:	Available data are inadequate to determine effects on reproduction.
Mutagenicity:	In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.
Aspiration hazard:	Based on physical properties, not likely to be an aspiration hazard.
<u>DIPHENYL KETONE</u>	
Sensitization	
For skin sensitization:	Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization: No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure): In animals, effects have been reported on the following organs: Blood, Kidney, Liver, Bone Marrow

Carcinogenicity: Has caused cancer in laboratory animals. However, the relevance of this to humans is unknown.

Teratogenicity: Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

Reproductive toxicity: In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.

Mutagenicity: In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

Aspiration Hazard: Based on physical properties, not likely to be an aspiration hazard.

Carcinogenicity

Component	List	Classification
Diphenyl Ketone	IARC	Group 2B: Possibly carcinogenic to humans

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

General Information: There is no data available for this product.

TOXICITY

Acrylic polymer(s)

Acute toxicity to fish: No relevant data found.

Residual monomers

Acute toxicity to fish: No relevant data found.
Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).
LC50, Oncorhynchus mykiss (rainbow trout), flow-through test, 96 Hour, 85 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates: EC50, Daphnia magna (Water flea), flow-through test, 48 Hour, > 130 mg/l

Acute toxicity to algae/aquatic plants: ErC50, Scenedesmus capricornutum (fresh water algae), static test, 72 Hour, Growth rate, 45 mg/l, OECD Test Guideline 201 or Equivalent

Toxicity to bacteria: EC50, Pseudomonas putida, static test, 17 Hour, Respiration rates. , 100 mg/l

Chronic toxicity to fish: NOEC, Danio rerio (zebra fish), flow-through test, 35 d, number of offspring, 10 mg/l

Chronic toxicity to aquatic invertebrates: NOEC, Daphnia magna (Water flea), flow-through test, 21 d, number of offspring, 53 mg/l

Aqua ammonia

Acute toxicity to fish:	Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested). LC50, Fish, 96 Hour, 0.89 mg/l
Acute toxicity to aquatic invertebrates:	LC50, Daphnia magna (Water flea), static test, 48 Hour, 101 mg/l
Acute toxicity to algae/aquatic plants:	Based on data from similar materials EC50, Chlorella vulgaris (Fresh water algae), 18 d, 2,700 mg/l
Chronic toxicity to fish:	Based on data from similar materials LOEC, Oncorhynchus mykiss (rainbow trout), 33 d, <= 0.05 mg/l
Chronic toxicity to aquatic invertebrates:	Based on data from similar materials NOEC, Daphnia magna (Water flea), 21 d, 0.42 mg/l

Diphenyl Ketone

Acute toxicity to fish:	Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested). LC50, Fathead minnow (Pimephales promelas), 96 Hour, 14.7 mg/l, Method Not Specified
Acute toxicity to aquatic invertebrates:	EC50, ceriodaphnia dubia (water flea), 48 Hour, 7.6 mg/l, Method Not Specified. EC50, Daphnia magna (Water flea), 48 Hour, 6.784 mg/l, OECD Test Guideline 202
Acute toxicity to algae/aquatic plants:	EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth rate, 3.5 mg/l, OECD Test Guideline 201, NOEC, Pseudokirchneriella subcapitata (green algae), 72 Hour, 1 mg/l, OECD Test Guideline 201
Toxicity to bacteria:	NOEC, 3 Hour, 31.6 mg/l, OECD Test Guideline 209
Chronic toxicity to fish:	NOEC, Pimephales promelas (fathead minnow), 7 d, 5.86 mg/l
Chronic toxicity to aquatic invertebrates:	NOEC, Daphnia (water flea), 21 d, 0.20 mg/l

PERSISTENCE AND DEGRADABILITY**Acrylic polymer(s)**

Biodegradability: No relevant data found.

Residual monomers

Biodegradability: No relevant data found.
Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
10-day Window: Pass
Biodegradation: 86 %
Exposure time: 28 d
Method: OECD Test Guideline 301 D or Equivalent

Photodegradation: Test Type: Half-life (indirect photolysis)
Sensitization: OH radicals
Atmospheric half-life: 6.884 Hour
Method: Estimated.

Photodegradation:

Test Type: Half-life (indirect photolysis)
Sensitization: Ozone.
Atmospheric half-life: 1.007 d
Method: Estimated.

Aqua ammonia**Biodegradability:**

Material is expected to be readily biodegradable. Biodegradation may occur under aerobic conditions (in the presence of oxygen).

Theoretical Oxygen Demand:

3.76 mg/mg Estimated.

Diphenyl Ketone**Biodegradability:**

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
10-day Window: Pass

Biodegradation:

66 - 84 %

Exposure time:

28 d

Method:

OECD Test Guideline 301 F

Theoretical Oxygen Demand:

2.63 mg/mg

Photodegradation:

Test Type: Half-life (indirect photolysis)
Sensitization: OH radicals
Atmospheric half-life: 3.009 d
Method: Estimated.

BIOACCUMULATIVE POTENTIAL**Acrylic polymer(s)****Bioaccumulation:**

No relevant data found.

Residual monomers**Bioaccumulation:**

No relevant data found. No bioconcentration is expected because of the relatively high water solubility.

Partition coefficient:

n-octanol/water(log POW): 0.93 Measured

Bioconcentration factor (BCF):

3.16 Fish Estimated.

Aqua ammonia**Bioaccumulation:**

Partitioning from water to n-octanol is not applicable.

Diphenyl Ketone**Bioaccumulation:**

Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient:

n-octanol/water(log POW): 3.18 Measured

Bioconcentration factor (BCF):

3.4 - 9.2 Cyprinus carpio (Carp) 42 d

Measured Bioconcentration factor (BCF): 3.4 12 Oryzias latipes (Orange-red killifish) 42 d Measured

MOBILITY IN SOIL

Acrylic polymer(s): No relevant data found.

Residual monomers: No relevant data found.

Potential for mobility in soil is very high (Koc between 0 and 50). Partition coefficient (Koc): 15

Aqua ammonia: No specific, relevant data available for assessment.

Diphenyl Ketone: Potential for mobility in soil is medium (Koc between 150 and 500). Partition coefficient (Koc): 430 Measured

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal methods: Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. For disposal, incinerate or landfill at a permitted facility in accordance with local, state, and federal regulations.

Contaminated packaging: Empty containers retain product residues. Follow label warnings even after container is emptied. Improper disposal or reuse of this container may be dangerous and illegal. Refer to applicable federal, state and local regulations.

SECTION 14 - TRANSPORT INFORMATION

DOT: Not regulated for transport

Classification for SEA transport (IMO-IMDG): Not regulated for transport

Transport in bulk Consult IMO regulations before transporting ocean bulk according to Annex I or II of MARPOL 73178 and the IBC or IGC Code

Classification for AIR transport (IATA/ICAO): Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15 - REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

No SARA Hazards

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

Calculated RQ exceeds reasonably attainable upper limit.

Components	CASRN	RQ (RCRA code)
Aqua ammonia	1336-21-6	100 lbs RQ

Pennsylvania

Any material listed as "Not Hazardous" in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

California Prop. 65

WARNING: This product can expose you to chemicals including Diphenyl Ketone, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

United States TSCA Inventory (TSCA)

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SECTION 16 - OTHER INFORMATION

Hazard Rating System

HMIS

Health	Flammability	Physical Hazard
1		

Revision

Identification Number: 10078705 / 1001 / Issue Date: 08/29/2018 / Version: 5.2

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Le end

ACGIH	USA. ACGIH Threshold Limit Values TLV)
Dow IHG	Dow Industrial Hygiene Guideline
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
SKIN	Absorbed via skin
STEL	Short term exposure limit
TWA	Time weighted average
US WEEL	USA. Work Place Environmental Exposure Levels WEEL

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA National Fire Protection Association; NO(A) EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT Self-Accelerating Decomposition Temperature; SARA Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

JON-DON urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

US