Safety Data Sheet (SDS)

1. Identification

A. Product name: ROCKHARD COLOR (BASE)

B. Recommended Use and Restriction on Use

O General use : For concrete

O Restriction on use: Restricted to use other than recommended use

C. Manufacturer / Supplier / distributor information

O Company name: Xtreme Polishing Systems

O Address: 2200 NW 32 St. #700 Pompano Beach, FL, USA

○ Emergency telephone number :ChemTel: MIS7038570 (800)255-3924

2. Hazard identification

A. GHS Classification

Acute toxicity (dermal) Category 3

Acute toxicity (inhalation: vapor) Category 3

Chronic aquatic toxicity Category 2

Serious eye damage/irritation Category 2A

Skin sensitization Category 1

Skin corrosion/irritation Category 2

Ozone Layer Hazards

B. GHS label elements

O Hazard symbols





O Signal words : DANGER

O Hazard statements :

H311 Toxic in contact with skin

H331 Toxic if inhaled

H411 Toxic to aquatic life with long lasting effects

H319 Causes serious eye irritation

H317 May cause an allergic skin reaction

H315 Causes skin irritation

H420 It destroys the upper layer of the ozone layer and is harmful to public health and environment.

 \bigcirc Precautionary statements

- Prevention

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

- Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P321 Specific treatment

P361+P364 Take off immediately all contaminated clothing and wash it before reuse.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor/physician.

P391 Collect spillage.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists, get medical attention / attention.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash before reuse.

P332+P313 If skin irritation occurs: Get medical advice/attention.

- Storage

P405 Store in a locked place.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

- Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international

P502 Please refer to the information provided by the manufacturer / supplier on recycling and recycling examples.

C. Other hazards which do not result in classification: (NFPA Classification)

Certain Hazardo William do hot rood in moradori roatron - (Will A Gradori roatron)						
Chemical Name	NFPA grade	Health	Flammability	Reactivity		
Limestone		1	0	0		
2,2-Bis(4'-glycidyloxyphenyl)propane		2	2	0		

Neodecanoic acid 2,3-epoxypropyl ester	2	1	0
Trade secret	NO DATA	A NO DATA	NO DATA
Kaolin	1	0	0
Benzyl alcohol	2	1	0
2-Butoxyethanol	3	2	0
Ethylbenzene	2	3	0
Solvent naphtha (petroleum), light arom.	1	2	0
(Butoxymethyl)oxirane	3	2	1

3. Composition/information on ingredients

Chemical Name	Trade names and Synonyms	CAS-NO	Content(%)
Limestone	Limestone	1317-65-3	49~59
2,2-Bis(4'-glycidyloxyphenyl)propane	2,2-Bis(4'-glycidyloxyphenyl)propane	1675-54-3	33~43
Neodecanoic acid 2,3-epoxypropyl ester	Neodecanoic acid 2,3-epoxypropyl ester	26761-45-5	1~10
Trade secret	-	-	1~10
Kaolin	Kaolin	1332-58-7	1~10
Benzyl alcohol	Benzyl alcohol	100-51-6	1~10
2-Butoxyethanol	2-Butoxyethanol	111-76-2	0.1~4
Ethylbenzene	Ethylbenzene	100-41-4	0.1~4
Solvent naphtha (petroleum), light arom.	Solvent naphtha (petroleum), light arom.	64742-95-6	0.1~4
(Butoxymethyl)oxirane	(Butoxymethyl)oxirane	2426-08-6	0.1~4

4. First-aid measures

- A. Eye Contact: If you wear a contact lenses, remove them first. Do not rub your eyes. If irritation, pain, swelling, tears or glaring happens, take medical assistant immediately Flush exposed eyes with plenty of water for more than 15minutes.
- B. Skin Contact: Wear gloves while washing the patient and avoid contact with exposed clothes. Wash carefully after handling. If symptoms like redness or irritation occurs, take medical assistant immediately. Wash off with soap and water for more than 15 minutes. And take medical assistant immediately. If symptoms like irritation or pain occurs, take medical assistant immediately. Remove exposed clothing, and wash off exposed area with soap and water.
- C. Inhalation: Take a medical assistant immediately. Remove contaminated clothing and shoes, and isolate it. If hard to breathe, administering oxygen Perform the artificial respiration, using the pocket mask with one way valves or other respiratory medical devices. If inhalated or swallowed, do not perform the inhalation phase of breathing If not breathing, perform the artificial respiration. Avoid from exposure, and move into an area with fresh air.
- D. Ingestion Contact: Flush mouth with water immediately. It is need to be considered that early removal of some ingested material by gastric lavage must be weighed against potential complications of bleeding or perforation Take proper medical assistant by symtoms. If ingested large quantity, take medical assistant. Do not try to induce vomiting, if occurs, keep head below hips to prevent swallow into lungs. Inducing vomit.
- E. Notes to Physician: There is no specific antidote and take an appropriate medical treatment.

5. Fire-fighting measures

- A. Suitable (Unsuitable) extinguishing media
 - O Suitable extinguishing media: Powder extinguishing agent, gaseous Extinguishing Agent, and regular foam.
 - O (Unsuitable) extinguishing media: Avoid extinguishing fire with halogenting agent. Avoid use waterjet as fire extinguishing agent. Water is not appropriate extinguishing agent
 - O Case of big fire: Use appropriate protective device depend on the situation. Stay away more than 800m to avoid tank explosion. Spread large amount of the extinguishing agent as a mist form with staying against wind.
- B. Specific hazards arising from the chemical
 - O Pyrolysate: Irritating and highly toxic gases may produced during the combustion by pyrolysis or combustion itself. Carbon dioxide, toxic carbon compounds/Nitrogen compounds/sulfur compounds
 - O Fire and Explosion danger: Vapors may explode indoors, outdoors, and in drains Leakages may fire / explosion hazard and could be easily ignited by heat, sparks or flames. Container may explode when heating May form explosive mixture at or above ignition point Vapor may be released to the ignition source and ignited. Aqueous (Exclude water-soluble one) products does not have risk of fire or explosion hazard by itself. Risk of medium-sized fire.
- C. Special protective actions for fire-fighters
 - O Personal Precautions, protective equipment: Gas mask or air respirator, heat resistant clothing, heat resistant helmet, heat resistant gloves, heat resistant boots
 - Emergency procedures: Do not approach if the tank is on fire. Avoid inhalation of the substance or combustion products. Use an unmanned fire extinguishing device, in case of large-sized fire. If not, leave it to burn. Tell the fire department, location of the fire and the hazardous features. Protect others from access and prohibit access to dangerous areas. Block the area except for the fire-suppression personnel. Cooling containers with water long time after extinguish fire. If there is no risk, moving containers away from fire. Use appropriate extinguishing agents to catch fire.

6. Accidental release measures

- A. Personal Precautions, protective equipment and emergency procedures
 - O Personal Precautions, protective equipment: Gas mask for organic gases, other appropriate protective device / clothing / gloves.
 - O Emergency procedures: Do not contact on the bare skin Do work with the personal protected devices such as gas mask for organic gases other appropriate protective devices / clothing / gloves. Spray water to reduce amount of

steam. Take an action to block the leakage if there is no risk.

- B. Environmental precautions
 - O Atmosphere : Using local ventilation to Minimize the exposure to worker. Do install the local ventilations and full ventilation system
 - O Soil: Use absorbent to collect the appropriate container. Trap spilled material at bottom in deep water pockets, excavated holding areas or within sand bag barriers.
 - O Under water: Collect spilled material with mechanic devices Use absorbent to collect the appropriate container.
- C. Methods and materials for containment and cleaning up
 - O Small spill: Move to appropriate container for disposal of spilled material collected. Absorb for use sand or other non-combustible material.
 - O Large spill: Notify to central and local government, when emissions are above regulation. Prohibit access of unnecessary people, isolate hazard area to secure.

7. Handling and storage

- A. Precautions for safe handling: Storing with combustible substances such as stained clothes or paper may cause fire by spontaneous ignition. Thus do not stack it, and keep it in a non-flammable container with cap filled with water and dispose it. Do not take contaminated clothings away from the work area. Avoid contact with heat, sparks, flames or other sources of ignition. Do not inhale vapor for long-term or repeatedly. Do not handle until read and understood all safety precautions. Avoid contact with prohibited materials in mixture. Wash carefully after handling. Use local ventilations and a full ventilation system when handling Seal the container for minimizing the petroleum steam Ground for preventing the static discharge Keep or handle followed by Dangerous goods Safety Management Act
- B. Conditions for safe storage, including any incompatibilities: Store away from waterworks and sewers. Collect in an airtight container to dispose. Prevent static electricity and do not store near heat sources. Store in original container only. Store in accordance with all current law and regulations. Check periodically for leaks Store in a cool, dry, well-ventilated area. Storage temperature: 25 ~ 35 °C Storage temperature: 15 ~ 25 °C Storage temperature: 5 ~ 15 °C Stored in an isolated place, freezing caution, high temperature body caution. Avoid strong oxidizing agents, acid. Storage temperature: 5 ~ 35 °C Avoid direct sunlight while storing outdoor. Because of evaporation and contamination concerns, airtight the container and store in a well-ventilated building.

8. Exposure controls/personal protection

- A. Exposure Limits Limestone - ACGIH : NO DATA - Biological exposure indices : NO DATA 0 2,2-Bis(4'-glycidyloxyphenyl)propane - ACGIH : NO DATA - Biological exposure indices : NO DATA ○ Neodecanoic acid 2,3-epoxypropyl ester - ACGIH : NO DATA - Biological exposure indices : NO DATA Trade secret - ACGIH : NO DATA - Biological exposure indices : NO DATA ○ Kaolin - ACGIH : NO DATA - Biological exposure indices : NO DATA Benzyl alcohol ACGIH : NO DATA - Biological exposure indices : NO DATA 2-Butoxvethanol - ACGIH : TWA. 20 ppm (97 mg/m3) - Biological exposure indices: While urinating - Butoxyacetic acid (BAA)(with hydrolysis): 200 mg/g (After work) ○ Ethy I benzene - ACGIH : NO DATA - Biological exposure indices : NO DATA O Solvent naphtha (petroleum), light arom. - ACGIH : NO DATA - Biological exposure indices : NO DATA ○ (Butoxymethyl)oxirane - ACGIH : NO DATA - Biological exposure indices : NO DATA
- B. Engineering Controls:
 - ho Do install the local ventilations and full ventilation system
 - ▷ Using local ventilation to Minimize the exposure to worker.
 - ${
 hd} {
 hd$
 - NO DATA
- C. Personal Protective Equipment
 - O Respiratory protection: If there is possibility of direct contact or exposure to these substances should wear a authorized dust-proof mask or respirator for organic compounds Respiratory protection is ranked in order from minimum to maximum Respiratory protection may be needed, while frequent use or heavy exposure. Consider warning properties before use. Use the personal protect respirator for organic solvent or higher level of capacity when workers are supposed to be exposed under unsuitable respiratory working condition, or longer period exposure than standard level. Respirators should be authorized by Occupational Safety and Health Agency

- O Eye protection: If there is possibility of direct contact or exposure to these substances should wear authorized safty glasses or mask. Let workers do wear the safety glasses in case hazard caused by mist may be expected. Install washing facilities and an emergency washing facilities close to workplace. Use the respirator for organic solvent or higher level.
- O Hand protection: If there is possibility of direct contact or exposure to these substances should wear authorized safety gloves for chemicals. Wear appropriate protective gloves Wear the chemical protective gloves Do the workers wear the impermeable protective gloves made from rubber/PVC due to skin irritation may be supposed by chronicle and long period exposure.
- O Skin protection: If there is a possibility of direct contact or exposure to the substance Wear protective clothing for chemical substances Wear cleanroom garment or appropriate protective clothing to prevent contamination Wear appropriate chemical protective clothing. Work after wearing the impermeable protective apron made by rubber/PVC in case hazard caused by exposure or spill, wear the impermeable whole body protective clothing if needed.

9. Physical and chemical properties

A. Appearance : PIGMENTED LIQUID

B. Odor : Specific OdorC. Odor threshold : NO DATA

D. PH: NO DATA

E. Melting point/Freezing point(°C): NO DATA

F. Initial Boiling Point/Boiling Ranges(℃): 171℃

G. Flash point(°C) : 68

H. Evaporating Rate: NO DATA

I. Flammability(solid, gas)(℃) : NO DATA

J. Upper/Lower Flammability or explosive limits: NO DATA

K. Vapour pressure : NO DATAL. Solubility :(water) insoluble

M. Vapour density : NO DATA N. Specific gravity : 1.5 \pm 0.3

O. Partition coefficient of n-octanol/water : NO DATA

P. Autoignition temperature($^{\circ}$): 425

Q. Decomposition temperature(°C) : NO DATA

R. Viscosity : 30~250PoiseS. Molecular weight : NO DATA

10. Stability and reactivity

A. Chemical stability: NO DATA

- B. Possibility of hazardous reactions: Avoid contaminants and friction Do not contact with heat, spark, flame or other flammable sources
- C. Conditions to avoid : Oxidation agent, metal and combustable materials
- D. Hazardous decomposition products: Thermal decomposition products (carbon etc.,)

11.Toxicological information

- A. Information on the likely routes of exposure
 - \bigcirc Respiratory tracts : Adverse lung effects, Dyspnoea, Hypothermia, Vomitting
 - O Oral : Vomitting, Diarrhea, Stomach pain, Irregular heartbeat
 - O Skin : Irritation, Burn, Adverse nerve effects
 - \bigcirc Eye : Irritation, eye damage
- B. Delayed and immediate effects and also chronic effects from short and long term exposure
 - Limestone

- Acute toxicity
Oral: NO DATA
Dermal: NO DATA
Inhalation: NO DATA

- Skin corrosion/irritation : NO DATA - Serious eye damage/irritation : NO DATA - Respiratory sensitization : NO DATA

- Skin sensitization : NO DATA

- Carcinogenicity
IARC : NO DATA
OSHA : NO DATA
ACGIH : NO DATA
NTP : NO DATA
EU CLP : NO DATA

- Germ cell mutagenicity : NO DATA

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- Reproductive toxicity: NO DATA
  - STOT-single exposure : NO DATA
  - STOT-repeated exposure : NO DATA
  - Aspiration hazard : NO DATA
○ 2,2-Bis(4'-glycidyloxyphenyl)propane
  - Acute toxicity
    Oral : LD50 15600 mg/kg Other (Other)
    Dermal: LD50 20000 mg/kg Rabbit
    Inhalation: LD50 20000 mg/kg Rabbit
   - Skin corrosion/irritation : weakstimulus(500mg, rabbit)
  - Serious eye damage/irritation : Severe irritation(2mg, 24시간, rabbit)
  - Respiratory sensitization : NO DATA
  - Skin sensitization : NO DATA
  - Carcinogenicity
    IARC : Group 3
    OSHA: NO DATA
    ACGIH : NO DATA
    NTP : NO DATA
    EU CLP : NO DATA
  - Germ cell mutagenicity : NO DATA
  - Reproductive toxicity: NO DATA
  - STOT-single exposure : NO DATA
  - STOT-repeated exposure : NO DATA
  - Aspiration hazard : NO DATA
O Neodecanoic acid 2,3-epoxypropyl ester
  - Acute toxicity
    Oral : LD50 > 10 mg/kg Rat
    Dermal : LD50 = 4 mg/kg Rat
    Inhalation : LD50 = 4 mg/kg Rat
  - Skin corrosion/irritation : Rabbit / Draize Test: middle-stimulated
   - Serious eye damage/irritation : eye irritation
  - Respiratory sensitization : NO DATA
  - Skin sensitization: Guinea pig / maximization test it (GLP) / skin:sensitization
  - Carcinogenicity
    IARC : NO DATA
    OSHA: NO DATA
    ACGIH: NO DATA
    NTP : NO DATA
    EU CLP : NO DATA
  - Germ cell mutagenicity: Reverse mutation test positive, negative In all. Rat / liver degeneration using DNA
  test: negative
  - Reproductive toxicity: Reverse mutation test positive, negative In all. Rat / liver degeneration using DNA
  test: negative
  - STOT-single exposure : NO DATA
  - STOT-repeated exposure : Rat / oral (100, 500, 1000, 5000, 10000 ppm for 5weeks) / OECD TG 407 (GLP): NOAEL =
  1000ppm
  - Aspiration hazard : NO DATA
O Trade secret
  - Acute toxicity
    Oral : NO DATA
    Dermal: NO DATA
    Inhalation: NO DATA
  - Skin corrosion/irritation : NO DATA
  - Serious eye damage/irritation : NO DATA
  - Respiratory sensitization : NO DATA
  - Skin sensitization : NO DATA
  - Carcinogenicity
    IARC: NO DATA
    OSHA: NO DATA
    ACGIH : NO DATA
    NTP : NO DATA
    EU CLP : NO DATA
  - Germ cell mutagenicity : NO DATA
  - Reproductive toxicity : NO DATA
  - STOT-single exposure : NO DATA
  - STOT-repeated exposure : NO DATA
  - Aspiration hazard : NO DATA
○ Kaolin
  - Acute toxicity
    Oral : NO DATA
    Dermal : NO DATA
    Inhalation : NO DATA
  - Skin corrosion/irritation : NO DATA
  - Serious eye damage/irritation : NO DATA
  - Respiratory sensitization : NO DATA
  - Skin sensitization : NO DATA
  - Carcinogenicity
    IARC : NO DATA
    OSHA: NO DATA
    ACGIH : A4
    NTP : NO DATA
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EU CLP : NO DATA

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- Germ cell mutagenicity : NO DATA
  - Reproductive toxicity : NO DATA
  - STOT-single exposure : NO DATA
  - STOT-repeated exposure : NO DATA
  - Aspiration hazard : NO DATA
O Benzyl alcohol
  - Acute toxicity
    Oral : LD50 = 1230 mg/kg Rat
    Dermal: LD50 = 2000 mg/kg Rabbit
    Inhalation : LD50 = 2000 mg/kg Rabbit
  - Skin corrosion/irritation : usuallystimulus(100mg, 24H, rabbit)
  - Serious eye damage/irritation : Non-irritating(rabbit)
  - Respiratory sensitization : NO DATA
  - Skin sensitization : NO DATA
  - Carcinogenicity
    IARC : NO DATA
    OSHA: NO DATA
    ACGIH : NO DATA
    NTP : NO DATA
    EU CLP : NO DATA
  - Germ cell mutagenicity : NO DATA
  - Reproductive toxicity : NO DATA
  - STOT-single exposure : NO DATA
  - STOT-repeated exposure : NO DATA

    Aspiration hazard : NO DATA

○ 2-Butoxyethanol
  - Acute toxicity
    Oral: LD50 1414 mg/kg Guinea pig (OECD TG 401, GLP)
    Dermal : LD50 >2000 mg/kg Rat (ECHA)
    Inhalation: Vapor LC50 >7.4 mg/\ell 7 hr Rat (ECHA)
  - Skin corrosion/irritation: As a result of skin irritation test using rabbits, it is erythema irritation 2,
  which is not applicable under the GHS standard, but it is sufficient to determine that it is irritating EU Method
  B.4 (ECHA)
  - Serious eye damage/irritation: Eye irritation test results showed conjunctival irritation index 2.6, iritis
  0.56, conjunctival edema 1.8, indicating irritation OECD TG405, GLP (ECHA)
   - Respiratory sensitization : NO DATA
  - Skin sensitization: Skin sensitization test results using guinea pigs non-sensitization (OECD TG 406, ECHA)
  - Carcinogenicity
    IARC : Group 3
    OSHA: NO DATA
    ACGIH : A3
    NTP: NO DATA
    EU CLP : NO DATA
  - Germ cell mutagenicity: Reverse mutation test using in vitro microorganisms OECD TG471, chromosomal
  abnormality test using mammalian cells OECD TG473 result negative, micronucleus test using mammalian bone marrow
  cells in vivo OECD TG474 result negative (ECHA)
  - Reproductive toxicity: 2nd generation reproductive toxicity test (NTP) results, NOAEL (parental toxicity) =
  720 mg/kg bw/day due to weight loss, fertility, etc., NOAEL (F1, F2) = 720 mg/kg bw/ due to weight loss of
  offspring day, no effect on reproductive toxicity was observed, developmental toxicity and teratogenic effects
  were not observed as a result of developmental toxicity test using rats (OECD TG414) NOAEL (development) = 100
  mg/kg bw/day, NOAEL (teratogenicity)> 200 mg/kg bw/day (ECHA)
  - STOT-single exposure: As a result of respiratory irritation test using mice, RD50 2818 ppm showed minimal or
  no sensory stimulation (ECHA)
  - STOT-repeated exposure : As a result of a 90-day repeated oral toxicity test in rats, OECD TG408 showed some
  abnormalities in liver and cytoplasm in histopathological findings, but no adverse effects were observed. NOAEL
  male <69 mg/kg bw/day, NOAEL female <82 mg/kg bw/day 90-day inhalation repeat toxicity test using mice OECD
  TG413, GLP Results NOAEC <31ppm (ECHA)
  - Aspiration hazard : NO DATA
○ Ethylbenzene
  - Acute toxicity
    Oral : LD50 = 3500 mg/kg Rat
    Dermal: LD50 = 15400 mg/kg Rabbit
    Inhalation : Steam LC50 = 4000 ppm 4 hr Rat (Equivalents : 17.4 mg/L)
  - Skin corrosion/irritation : skin Irritation test result weak Irritation
  - Serious eye damage/irritation: Rabbit eye irritation test results in a slight conjunctival irritation,
  recoverable damage.
  - Respiratory sensitization : NO DATA
  - Skin sensitization : NO DATA
  - Carcinogenicity
    IARC : Group 2B
    OSHA: NO DATA
    ACGIH : A3
    NTP : NO DATA
    EU CLP : NO DATA
  - Germ cell mutagenicity : Micronucleustest Negative (7)
  - Reproductive toxicity : Micronucleustest Negative (7)
  - STOT-single exposure : It causes central nervous system effects in laboratory animals and airway irritation.
  - STOT-repeated exposure : NO DATA
  - Aspiration hazard: Hydrocarbons. Swallowing the liquid by aspiration may cause chemical pneumonia. Ties
  seongryuI 0.74 mm2 / s (25 ℃)
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O Solvent naphtha (petroleum), light arom.

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- Acute toxicity
         Oral : LD50 = 8400 mg/kg Rat
         Dermal: LD50 > 2000 mg/kg Rabbit
          Inhalation: LD50 > 2000 mg/kg Rabbit
       - Skin corrosion/irritation : weakstimulus(rabbit)
       - Serious eye damage/irritation : Mild irritant(rabbit)
       - Respiratory sensitization : NO DATA
       - Skin sensitization: Non-sensitizer (Guinea pig)
       - Carcinogenicity
         IARC : NO DATA
         OSHA: NO DATA
         ACGIH : NO DATA
         NTP : NO DATA
         EU CLP : Carc. 1B
       - Germ cell mutagenicity : EU CLP: 1B (case containing less than 0.1% of the benzene in a weight ratio of the
       material not applied to the present classification)
       - Reproductive toxicity: EU CLP: 1B (case containing less than 0.1% of the benzene in a weight ratio of the
       material not applied to the present classification)
       - STOT-single exposure : Affecting the central nervous system. Inhalation of high concentrations vapors may cause
       loss of consciousness.
       - STOT-repeated exposure : NO DATA
       - Aspiration hazard : Harmful aspiration concerns
     ○ (Butoxymethyl)oxirane
       - Acute toxicity
         Oral : LD50 = 1660 mg/kg Rat
         Dermal: LD50 = 788 mg/kg Babbit
          Inhalation: LD50 = 788 mg/kg Rabbit
        - Skin corrosion/irritation : weakstimulus(454mg, 3day, rabbit), usuallystimulus(20mg, 24H. rabbit) skin -
       stimulus
       - Serious eye damage/irritation : Severe irritation(750ug, 24hr, rabbit), Mild irritant(91mg, rabbit)
       - Respiratory sensitization : NO DATA
       - Skin sensitization : Skin sensitization in humans have been reported
       - Carcinogenicity
          IARC: NO DATA
         OSHA: NO DATA
         ACGIH : NO DATA
         NTP : NO DATA
         EU CLP : Carc.2
       - Germ cell mutagenicity : Using Mouse Micronucleus test result Positive
       - Reproductive toxicity : rat micronucleus test : positive
       - STOT-single exposure : Irritating people appear to pray
       - STOT-repeated exposure : NO DATA
       - Aspiration hazard : NO DATA
12. Ecological information
  A. Ecotoxicity

    Limestone

       - Fish : NO DATA
       - Crustaceans : NO DATA
       - Algae : NO DATA
     0 2,2-Bis(4'-glycidyloxyphenyl)propane
       - Fish : NO DATA
       - Crustaceans : NO DATA
        - Algae : NO DATA
     O Neodecanoic acid 2,3-epoxypropyl ester
       - Fish : LC50 = 5 mg/\ell 96 hr Oncorhynchus mykiss
       - Crustaceans : EC50 = 4.8 mg/ & 48 hr Daphnia magna
       - Algae : EC50 = 3.5 mg/ \ell 96 hr Selenastrum capricornutum
     O Trade secret
       - Fish : NO DATA
       - Crustaceans : NO DATA
       - Algae : NO DATA
     ○ Kaolin
       - Fish : NO DATA
       - Crustaceans : NO DATA
       - Algae : NO DATA
     O Benzvl alcohol
       - Fish : LC50 = 10 mg/\ell 96 hr
       - Crustaceans : NO DATA
       - Algae : NO DATA
     2-Butoxyethanol
       - Fish : LC50 1474 mg/ℓ 96 hr Oncorhynchus mykiss(OECD Guideline 203)
       - Crustaceans : EC50 1800 mg/\ell 48 hr Daphnia magna(OECD TG 202)
       - Algae : EC50 911 mg/l 72 hr Selenastrum capricornutum(OECD TG 201)
     ○ Ethy I benzene
       - Fish : LC50 = 9.09 \text{ mg}/\ell 96 hr
       - Crustaceans : LC50 = 0.4 mg/\ell 96 hr
       - Algae : NO DATA

    Solvent naphtha (petroleum), light arom.
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- Fish : LC50 = 9.22 mg/ ℓ 96 hr Oncorhynchus mykiss - Crustaceans : EC50 = 6.14 mg/ ℓ 48 hr Daphnia magna

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- Algae : EC50 = 19 mg/ \ell 72 hr Selenastrum capricornutum
  ○ (Butoxymethyl)oxirane
     - Fish : NO DATA
    - Crustaceans : NO DATA
    - Algae : NO DATA
B. Persistence and degradability
  ○ Limestone
     - Persistence : NO DATA
     - Degradability: NO DATA
  ○ 2,2-Bis(4'-glycidyloxyphenyl)propane
    - Persistence : NO DATA
    - Degradability : NO DATA
  O Neodecanoic acid 2,3-epoxypropyl ester
     - Persistence : log Kow = 4.4 (20℃)
     - Degradability : NO DATA
  O Trade secret
     - Persistence : NO DATA
    - Degradability : NO DATA
  ○ Kaolin
    - Persistence : NO DATA
    - Degradability : NO DATA
  O Benzyl alcohol
    - Persistence : log Kow = 1.1
    - Degradability : NO DATA
  ○ 2-Butoxyethanol
     - Persistence : 0.81 log Kow (25 ° C, pH=7, BASF standard method)
     - Degradability : NO DATA
  ○ Ethylbenzene
     - Persistence : NO DATA
    - Degradability : NO DATA
  O Solvent naphtha (petroleum), light arom.
    - Persistence : log Kow = 2.1 ~ 6 (Estimates)
     - Degradability : BOD5/COD = 0.43
  ○ (Butoxymethyl)oxirane
     - Persistence : NO DATA
    - Degradability : NO DATA
C. Bioaccumulative potential
  ○ Limestone
    - Bioaccumulative potential : NO DATA
     - Biodegration : NO DATA
  ○ 2,2-Bis(4'-glycidyloxyphenyl)propane
    - Bioaccumulative potential : NO DATA
     - Biodegration : NO DATA
  O Neodecanoic acid 2,3-epoxypropyl ester
     - Bioaccumulative potential : BCF = 148.8
     - Biodegration : Biodegradability = 7 ~ 8 (%) 28 day (OECD TG 301D)
  O Trade secret
    - Bioaccumulative potential : NO DATA
    - Biodegration : NO DATA
  ○ Kaolin
    - Bioaccumulative potential : NO DATA
    - Biodegration : NO DATA
  O Benzvl alcohol
     - Bioaccumulative potential : NO DATA
    - Biodegration: Biodegradability = 94 (%) 28 day (Aerobic, Activated Sludge)
  ○ 2-Butoxyethanol
    - Bioaccumulative potential : NO DATA
    - Biodegration: 90.4 % 28 day (OECD TG 301G)
  ○ Ethylbenzene
     - Bioaccumulative potential: NO DATA
     - Biodegration : NO DATA
  O Solvent naphtha (petroleum), light arom.
    - Bioaccumulative potential : NO DATA
     - Biodegration : NO DATA
  ○ (Butoxymethyl)oxirane
     - Bioaccumulative potential : NO DATA
    - Biodegration : NO DATA
D. Mobility in soil
  ○ Limestone
    NO DATA
  ○ 2,2-Bis(4'-glycidyloxyphenyl)propane
    > NO DATA
  O Neodecanoic acid 2,3-epoxypropyl ester
     > NO DATA
  O Trade secret
    NO DATA
  \bigcirc Kaolin
     NO DATA
```

○ Benzyl alcohol

NO DATA ○ 2-Butoxyethanol NO DATA Ethylbenzene \triangleright log Kow = 3.15 (11) O Solvent naphtha (petroleum), light arom. NO DATA ○ (Butoxymethyl)oxirane NO DATA E. Other adverse effects ○ Limestone NO DATA ○ 2,2-Bis(4'-glycidyloxyphenyl)propane ○ Neodecanoic acid 2,3-epoxypropyl ester NO DATA O Trade secret NO DATA ○ Kaolin NO DATA O Benzyl alcohol > NO DATA ▷ FIsh Danio rerio: NOEC14d>100 mg/L OECD TG 204, Crustacean Daphnia magna: NOEC21d=100 mg/L OECD TG 211 (ECHA) ○ Ethylbenzene NO DATA O Solvent naphtha (petroleum), light arom. NO DATA ○ (Butoxymethyl)oxirane NO DATA

13. Disposal considerations

- A. Disposal methods: To prevent environmental pollution, dispose it to a licensed waste disposal company. Recycle the recycleable materials, such as organic solvents, and then incinerate the residue at high temperature. Pre-treat with oil-water separation method when it is available. Disposal material should keep in the airtighted container, and consign according to Waste Mateial Management Act
- B. Special precautions for disposal: Discard it followed by appropriate regulations Prohibit the unauthorized disposal and incineration due to adversely affect natural ecosystems

14. Transport information

A. UN number : 3082

B. Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (Limestone)

C. Hazard class : 9D. Packing group : III

E. Marine pollutant : be applicable

F. Special precautions for user related to transport or transportation measures

EmS FIRE SCHEDULE : F-AEmS SPILLAGE SCHEDULE : S-F

15. Regulatory information

○ Limestone

- Information of EU Classification

Classification : NO DATA
 Risk Phrases : NO DATA
 Safety Phrase : NO DATA

- U.S. Federal regulations

○ OSHA PROCESS SAFETY (29CFR1910.119): notapplicable
 ○ CERCLA Section 103 (40CFR302.4): notapplicable

▷ EPCRA Section 302 (40CFR355.30): notapplicable
 ▷ EPCRA Section 304 (40CFR355.40): notapplicable

▷ EPCRA Section 313 (40CFR372.65) : notapplicable

- Rotterdam Convention listed ingredients: NO DATA

- Stockholm Convention listed ingredients: NO DATA

- Montreal Protocol listed ingredients : NO DATA

○ 2,2-Bis(4'-glycidyloxyphenyl)propane

- Information of EU Classification

▷ Classification : NO DATA
 ▷ Risk Phrases : NO DATA
 ▷ Safety Phrase : NO DATA

- U.S. Federal regulations

▷ OSHA PROCESS SAFETY (29CFR1910.119) : notapplicable

▷ CERCLA Section 103 (40CFR302.4) : notapplicable

 $\,\,\vartriangleright\,\,$ EPCRA Section 302 (40CFR355.30) : notapplicable

 $\,\vartriangleright\,$ EPCRA Section 304 (40CFR355.40) : notapplicable

```
▷ EPCRA Section 313 (40CFR372.65) : notapplicable
  - Rotterdam Convention listed ingredients : NO DATA
  - Stockholm Convention listed ingredients : NO DATA
  - Montreal Protocol listed ingredients : NO DATA
O Neodecanoic acid 2.3-epoxypropyl ester
  - Information of EU Classification

    Classification : NO DATA

     ▷ Risk Phrases : NO DATA

    ▷ Safety Phrase : NO DATA

  - U.S. Federal regulations
     ▷ OSHA PROCESS SAFETY (29CFR1910.119) : not applicable
     ▷ CERCLA Section 103 (40CFR302.4) : not applicable
     ▷ EPCRA Section 302 (40CFR355.30) : not applicable
     ▷ EPCRA Section 304 (40CFR355.40) : not applicable
     ▷ EPCRA Section 313 (40CFR372.65) : not applicable
  - Rotterdam Convention listed ingredients : NO DATA
  - Stockholm Convention listed ingredients: NO DATA
  - Montreal Protocol listed ingredients : NO DATA
O Trade secret
  - Information of EU Classification

    ▷ Classification : NO DATA

     ▷ Risk Phrases : NO DATA
     ▷ Safety Phrase : NO DATA
  - U.S. Federal regulations
     ▷ OSHA PROCESS SAFETY (29CFR1910.119) : NO DATA
     ▷ CERCLA Section 103 (40CFR302.4) : NO DATA
     ▷ EPCRA Section 302 (40CFR355.30) : NO DATA

hinspace EPCRA Section 304 (40CFR355.40) : NO DATA
     ▷ EPCRA Section 313 (40CFR372.65) : NO DATA
  - Rotterdam Convention listed ingredients : NO DATA
  - Stockholm Convention listed ingredients : NO DATA
  - Montreal Protocol listed ingredients : NO DATA
○ Kaolin
  - Information of EU Classification
     ▷ Classification : NO DATA

▷ Risk Phrases : NO DATA

    ▷ Safety Phrase : NO DATA

  - U.S. Federal regulations
     ▷ OSHA PROCESS SAFETY (29CFR1910.119) : notapplicable
     ▷ CERCLA Section 103 (40CFR302.4) : notapplicable
     ▷ EPCRA Section 302 (40CFR355.30) : notapplicable
     ▷ EPCRA Section 304 (40CFR355.40) : notapplicable
     ▷ FPCBA Section 313 (40CFB372 65) : notanplicable
  - Rotterdam Convention listed ingredients : NO DATA
  - Stockholm Convention listed ingredients : NO DATA
  - Montreal Protocol listed ingredients : NO DATA
O Benzyl alcohol
   - Information of EU Classification

▷ Classification : NO DATA

     ▷ Risk Phrases : NO DATA

    ▷ Safety Phrase : NO DATA

  - U.S. Federal regulations
     ▷ OSHA PROCESS SAFETY (29CFR1910.119) : notapplicable
     ▷ CERCLA Section 103 (40CFR302.4) : notapplicable
     ▷ EPCRA Section 302 (40CFR355.30) : notapplicable
     ▷ EPCRA Section 304 (40CFR355.40) : notapplicable
     ▷ EPCRA Section 313 (40CFR372.65) : notapplicable
  - Rotterdam Convention listed ingredients : NO DATA
  - Stockholm Convention listed ingredients : NO DATA
  - Montreal Protocol listed ingredients : NO DATA
○ 2-Butoxyethanol
  - Information of EU Classification

    ▷ Classification : NO DATA

▷ Risk Phrases : NO DATA

     ▷ Safety Phrase : NO DATA
  - U.S. Federal regulations
     DOSHA PROCESS SAFETY (29CFR1910.119): NO DATA
     CERCLA Section 103 (40CFR302.4) : NO DATA
     ▷ EPCRA Section 302 (40CFR355.30) : NO DATA
     ▷ EPCRA Section 304 (40CFR355.40) : NO DATA
     ▷ EPCRA Section 313 (40CFR372.65) : NO DATA
  - Rotterdam Convention Listed ingredients: NO DATA
  - Stockholm Convention listed ingredients : NO DATA
  - Montreal Protocol listed ingredients : NO DATA
○ Ethylbenzene
  - Information of EU Classification

    ▷ Classification : NO DATA

▷ Risk Phrases : NO DATA

    ▷ Safety Phrase : NO DATA

  - U.S. Federal regulations
```

▷ OSHA PROCESS SAFETY (29CFR1910.119) : notapplicable

- ▷ CERCLA Section 103 (40CFR302.4) : 453.599 kg 1000 lb
- ▷ EPCRA Section 302 (40CFR355.30) : notapplicable ▷ EPCRA Section 304 (40CFR355.40) : notapplicable
- ▷ EPCRA Section 313 (40CFR372.65) : pertinent - Rotterdam Convention listed ingredients : NO DATA
- Stockholm Convention listed ingredients : NO DATA
- Montreal Protocol listed ingredients : NO DATA
- O Solvent naphtha (petroleum), light arom.
 - Information of EU Classification
 - ▷ Classification : NO DATA ▷ Risk Phrases : NO DATA
 - ▷ Safety Phrase : NO DATA
 - U.S. Federal regulations
 - ▷ OSHA PROCESS SAFETY (29CFR1910.119) : notapplicable
 - ▷ CERCLA Section 103 (40CFR302.4) : notapplicable
 - ▷ EPCRA Section 302 (40CFR355.30) : notapplicable
 - ▷ EPCRA Section 304 (40CFR355.40) : notapplicable
 - ▷ EPCRA Section 313 (40CFR372.65) : notapplicable
 - Rotterdam Convention listed ingredients : NO DATA
 - Stockholm Convention listed ingredients : NO DATA
 - Montreal Protocol listed ingredients : NO DATA
- (Butoxymethyl)oxirane
 - Information of EU Classification
 - ▷ Classification : NO DATA
 - ▷ Risk Phrases : NO DATA
 - ▷ Safety Phrase : NO DATA - U.S. Federal regulations
 - ▷ OSHA PROCESS SAFETY (29CFR1910.119) : notapplicable
 - ▷ CERCLA Section 103 (40CFR302.4) : notapplicable
 - ▷ EPCRA Section 302 (40CFR355.30) : notapplicable
 - ▷ EPCRA Section 304 (40CFR355.40) : notapplicable
 - ▷ EPCRA Section 313 (40CFR372.65) : notapplicable
 - Rotterdam Convention listed ingredients : NO DATA
 - Stockholm Convention listed ingredients : NO DATA
 - Montreal Protocol listed ingredients : NO DATA

16. Other information

A. Reference

This SDS is based on 'Industrial safety and health' Act paragraph 41 and Proclamation of Ministry of Labor and Employment 2016-19, and considered domestic regulations. This SDS is based on KOSHA, NITE, ESIS, NLM, SIDS, IPCS, NCIS.

- B. Issue date : 2020-05-19
- C. Revision number and Last date revised : 1.(2020-09-22)
- D. Other : " WWW.XTREMEPOLISHINGSYSTEMS.COM "