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Section 1: Identification

1.1 Product identification

Product identifier : Mixture

Product name : PROMASTER (Z) G-9/9 [Colorant]

Product code : Not available

Recommended uses : Cosmetics - Hair Coloring Product

Restrictions on uses : No information available

1.2 Identification of company

Manufacturer/Supplier name : Hoyu America Co.

Division

Address : 6265 Phyllis Drive Cypress, CA 90630 US

Telephone number : 714-230-3000
FAX number : 714-230-3060
E-mail : info@hoyu-usa.com
1.3 Emergency telephone number : 1-800-848-4980
1.4 Reference number : 20-0032(US)

Section 2: Hazard Identification

2.1 Classification of the substance or mixture

2.1.1 Physico-Chemical hazard

Flammable Solids : Not classified

2.1.2 Health Hazard

Acute toxicity (Oral) Not classified Acute toxicity (Dermal) Not classified Acute toxicity (inhalation: dusts/mists) Not classified Skin corrosion/irritation Category 2 Serious eye damage/irritation Category 1 Respiratory sensitization Not classified Skin sensitization Category 1 Mutagenicity Not classified Reproductive toxicity Not classified Aspiration hazard Not classified Specific target organ toxicity (single exposure) Category 1 Specific target organ toxicity (repeated exposure) Not classified

2.1.3 Environmental Hazard

Acute environmental toxicity : Not classified

- * For those not listed on "2.1 Classification of the Substance or Mixture" are either "Not Applicable" or "Classification not Possible."
- * Hazard identification is made according to the 2012 OSHA communication Standard (29 CFR 1910.1210) and GHS rev. 7.

2.2 Label Element

Hazard Pictograms



Signal Word : Danger Hazard Statement : H315

: H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H370 Causes damage to organs Central Nervous System,

Respiratory Tract.

Precautionary Statement

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Dispose of contents/container to an approved waste

local/regional/national/international regulations.

disposal plant in accordance with

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General Precautions	:	P101	If medical advice is needed, have product container or label at hand.
		P102	Keep out of reach of children.
		P103	Read label before use.
Preventions	:	P264	Wash face, hands and any exposed skin thoroughly after handling.
		P280	Wear protective gloves/protective clothing/eye protection/face protection.
		P272	Contaminated work clothing should not be allowed out of the workplace.
		P260	Do not breathe dust/fume/gas/mist/vapors/spray.
		P270	Do not eat, drink or smoke when using this product.
Responses	:	P302+P352	IF ON SKIN: Wash with plenty of water.
•		P321	Specific treatment (see section 4 on this SDS).
		P362+P364	Take off contaminated clothing and wash it before
			reuse.
		P305+P354+	IF IN EYES: Immediately rinse with water for
		P338	several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing.
		P317	Get medical help.
		P333+P317	If skin irritation or rash occurs: Get medical help.
		P308+P316	IF exposed or concerned: Get emergency medical
			help immediately.
Storage	:	P405	Store locked up.
		D = 0.4	

2.3 Other hazards

Disposal

2.6% of the mixture consists of ingredient(s) of unknown acute toxicity (oral).

P501

Harmful to aquatic life with long lasting effects.

Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Use of alcoholic beverages may enhance toxic effects.

Section 3: Composition/Information on Ingredients

3 1	Substance	
J. 1	Substance	

	Chemical Name		CAS No.	Concentration (w/w %)
	Not applicable		Not applicable	Not applicable
3.2	Mixtures	:		_

Chemical Name	CAS No.	Concentration (w/w %)
PEG-32	25322-68-3	5 - 10
CETETH-30	68439-49-6	5 - 10
AMMONIUM HYDROXIDE	1336-21-6	1 - 5
STEARETH-2	9005-00-9	1 - 5
AMMONIUM BICARBONATE	1066-33-7	1 - 5
BEHENTRIMONIUM CHLORIDE	68607-24-9	1 - 5
PARAFFIN	8002-74-2	1 - 5
LANOLIN	8006-54-0	1 - 5
MINERAL OIL	8042-47-5	0.1 - 1
ASCORBIC ACID	50-81-7	0.1 - 1
RESORCINOL	108-46-3	0.1 - 1
AMODIMETHICONE	71750-79-3, 106842-44-8,	0.1 - 1

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	68554-54-1	
ISOPROPYL ALCOHOL	67-63-0	0.1 - 1
POLYQUATERNIUM-4	92183-41-0	0.1 - 1
4-NITRO-o-PHENYLENEDIAMINE	99-56-9	0.1 - 1
FRAGRANCE	N.A.	0.1 - 1
p-AMINOPHENOL	123-30-8	0.1 - 1
SODIUM SULFITE	7757-83-7	0.1 - 1

Section 4: First-aid Measures

4.1 Description of First Aid Measures

Inhalation : Remove to fresh air. Get medical attention immediately if symptoms occur.

Skin Contact : Wash off immediately with soap and plenty of water for at least 15 minutes. May

cause an allergic skin reaction. In the case of skin irritation or allergic reactions

see a physician.

Rinse immediately with plenty of water, also under the eyelids, for at least 15 Eye Contact

> minutes keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area. Seek immediate medical

attention/advice.

Ingestion : Rinse mouth immediately and drink plenty of water. Never give anything by

mouth to an unconscious person. DO NOT induce vomiting. Call a physician.

4.2 Most Important Symptoms/Effects

Burning sensation, itching, rashes, and/or hives. Acute Burning sensation, itching, rashes, and/or hives. Delayed

4.3 Protection for Person who gives First-Aids

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

4.4 Indication of Immediate Medical Attention and Special Treatment Needed

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. May cause sensitization of susceptible persons. Treat symptomatically.

Section 5: Fire-Fighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Inappropriate Extinguish Media No information available.

5.2 Specific Hazards Arising from

the Chemicals

Thermal decomposition can lead to release of irritating gases and

5.3 Special Extinguishing Method Sensitivity to mechanical impact: No

Sensitivity to static discharge: No

5.4 Special Protective Actions for

Fire-fighter

As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent) and

full protective gear.

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Protective Equipment Refer to protective measures listed in Section 7 and 8. Prevent

further leakage or spillage if safe to do so.

Avoid contact with skin, eyes or clothing. Ensure adequate Appropriate Procedure

ventilation. Use personal protective equipment as required.

Emergency Procedure Evacuate personnel to safe areas.

Refer to protective measures listed in Section 7 and 8. Prevent 6.2 Environmental Precautions

further leakage or spillage if safe to do so.

6.3 Methods and Materials for Containment and Cleaning up

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For Containment : Prevent further leakage or spillage if safe to do so.

For Cleaning up : Soak up with inert absorbent material. Pick up and transfer to

properly labeled containers.

Other Information : Not available

Section 7: Handling and Storage

7.1 Precautions for Safe Handling

General Precautions : Use personal protection equipment. Handle in accordance with

good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash

before reuse.

General Hygiene

: Do not eat, drink or smoke when using this product.

7.2 Conditions for Safe Storage

General Information : Keep containers tightly closed in a dry, cool and well-ventilated

place. Store locked up. Keep out of the reach of children.

Storage Conditions : Do not store with strong acids, strong oxidizing agents and/or

strong bases.

Other Information : Not available

Section 8: Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Chemical Name	ACGIH TLV	NIOSH IDLH	NIOSH REL	OSHA PEL
ISOPROPYL ALCOHOL	TWA : 200 ppm, ST : 400 ppm	2000 ppm [10%LEL]	TWA: 400 ppm (980 mg/m ³), ST: 500 ppm (1225 mg/m ³)	TWA: 400 ppm (980 mg/m³)
PARAFFIN	-	-	TWA: 2 mg/m ³	-
RESORCINOL	-	-	TWA: 10 ppm (45 mg/m³), ST: 20 ppm (90 mg/m³)	-
MINERAL OIL	TWA: 5 mg/m³ (IHL; excluding metal working fluids, pure highly and severely refined) (For poorly and mildly refined: exposure by all routes should be carefully controlled to levels as low as possible.)	2500 mg/m ³	TWA: 5 mg/m ³ , ST 10 mg/m ³	TWA: 5 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists – Threshold limit value.

OSHA PEL: Occupational safety and Health Administration – Permissible Exposure Limits Immediately Dangerous to Life or Health.

NIOSH IDLH: The National Institute for Occupational Safety and Health – Immediately Dangerous to Life or Health Concentrations.

8.2 Engineering Controls : Showers

Eyewash station Ventilation system

8.3 Individual Protection Measures

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Eve/Face Protection Tight sealing safety goggles.

Skin Protection Wear protective gloves and protective clothing. Long sleeved

clothing. Impervious gloves.

: No protective equipment is needed under normal use conditions. If Respiratory Protection

exposure limits are exceeded or irritation is experienced,

ventilation and evacuation may be required.

Thermal Hazard Not available

Handle in accordance with good industrial hygiene and safety Other Requirements

practice. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately

after handling the products.

Section 9: Physical and Chemical Properties

Physical State Solid (Cream)

Color Yellow to yellowish brown Odor Characteristic odor

9.4 - 10.4pH meter (1% aq. sol.)

Melting/Freezing Point No data available Not known Initial Boiling Point and Boiling Range No data available Not known Flash Point No data available Not known **Evaporation Rate** No data available Not known Flammability (Solid, Gas) Not meet a criteria under Not known

burning rate test by judging

from the product composition

Upper/lower Flammability or Explosive No data available

Limits

Vapor Pressure No data available Not known Density No data available Not known Relative Vapor Density No data available Not known Solubility Completely soluble in water Not known Partition Coefficient: n-octanol/water No data available Not known Autoignition temperature No data available Not known Decomposition temperature No data available Not known

Viscosity 25000 - 45000 mPa·s Type B viscometer

(No. $4 \frac{12 \text{ rpm}}{1 \text{ min}}$)

Not known

Kinetic viscosity No data available Not known Particle characteristics No data available Not known Explosive property No data available Not known

Oxidizing property No

VOC contents (%) No data available Other Information No information available

Section 10: Stability and Reactivity

Reactivity No data available

Chemical Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to Avoid None known

Incompatible Materials Oxidative agent and acid materials.

Hazardous Decomposition Products Carbon oxides, ammonia, and/or nitrogen oxide.

Section 11: Toxicological Information

Information on Toxicological Effects

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Acute Toxicity :

CETETH-30 LD50(oral, rat) = 1260 mg/kg
AMMONIUM HYDROXIDE LD50(oral, rat) = 350 mg/kg
STEARETH-2 LD50(oral, rat) = 25000 mg/kg
AMMONIUM BICARBONATE LD50(oral, rat) = 1576 mg/kg
BEHENTRIMONIUM LD50(oral, rat) = 1000 mg/kg

CHLORIDE

RESORCINOL LD50(oral, rat) = 301 mg/kg 4-NITRO-o-PHENYLENEDIAMI LD50(oral, rat) = 681 mg/kg

NE

p-AMINOPHENOL LD50(oral, rat) = 671 mg/kg

Skin Corrosion/Irritation

CETETH-30 Moderate irritation (Draize, Rabbit, RTECS). AMMONIUM HYDROXIDE Corrosive (rabbit, 20 % aq. Sol.) (SIDS 2008).

BEHENTRIMONIUM Corrosive to skin. Low concentration solution (1%) causes skin CHLORIDE irritation, and high concentration solutions(≥ 10%) may cause

inflammation, rash, etc.

AMODIMETHICONE Causes skin irritation.

RESORCINOL In the skin irritation test in which this substance was applied to

rabbits for 24 hours, there were reports of skin irritation scores 4.4 and 5.4, and scars and necrosis of the necrotic part were observed 14 days after application (SIDS (2009), DFGOT vol.

20 (2003), CICAD 71 (2006)).

In addition to reports that epidemiological investigations of 268 human subjects showed a direct relationship between the occurrence of dermatitis and this substance exposure (NTP TR 403 (1992), ACGIH (7 th, 2001)). Multiple dermatitis due to this substance exposure has been reported (SIDS (2009),

PATTY (6 th, 2012)).

4-NITRO-o-PHENYLENEDIAMI

NE

FRAGRANCE No information available

p-AMINOPHENOL The skin irritation test using rabbits was reported that mild

edema was induced 24 hours after application and recovered within 72 hours (primary stimulation score 0.2 (maximum value 8)) (SIAP 2010, HSDB Access on May 2017).

Serious Eye Damage/Irritation

PEG-32 Mild irritant (rabbit), but recovered within 24 to 48 hrs.

CETETH-30 Moderate irritation (Draize, Rabbit, RTECS).

Irritant.

AMMONIUM HYDROXIDE Corrosive (rabbit, 28.5 % aq. Sol.) (HSDB (Access on June

2014)).

BEHENTRIMONIUM Low concentration solution (0.1 - 1%) is strongly irritant to

CHLORIDE eyes, and high concentration solutions(≥10%) may cause

severe burnings with turbidity or angiogenesis.

PARAFFIN Slightly or mild irritant (rabbit, IUCLID, 2000 and RTECS,

2008).

AMODIMETHICONE Causes serious eye damage.

RESORCINOL In the eye irritation test using rabbit, there are reports that

non-recovering conjunctivitis, iritis, corneal opacity occurred(SIDS (2009)). Also there were reports that

nonrecorescious ulcer has developed (ACGIH (7th, 2001)). In addition, the irritation score is reported as 39.9-56.3 and 105 (maximum value 110) (SIDS (2009), CICAD 71 (2006)).

ISOPROPYL ALCOHOL Mild to strong irritation (rabbit) (EHC, 1990, SIDS, 2002,

PATTY 6th, 2012, and ECETOC TR48, 1998).

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4-NITRO-o-PHENYLENEDIAMI

NE

FRAGRANCE No information available

SODIUM SULFITE Causes eye irritation. Slight irritation on rabbit eyes. There is a report that it is irritating to human eyes (HSDB p-AMINOPHENOL

Access on May 2017) and a report that mild irritancy was seen in eye irritation test using rabbits (SIAP 2010, HSDB Access

No specific information given on the SDS from manufacturer.

on May 2017)

Respiratory or Skin Sensitization

RESORCINOL

There was a report that the positive rate was seen to be 30% or more in skin sensitization test using guinea pig (OECD TG 406, GLP compliant) (SIDS (2009), DFGOT vol. 20 (2003)).

4-NITRO-o-PHENYLENEDIAMI

NE

FRAGRANCE No information available

p-AMINOPHENOL There was a report causing bronchial asthma (HSDB (Access

on May 2017). It is stated that this substance is contained in hair dye and is a causative substance of contact dermatitis to barber and consumer (Contact Dermatitis 5th ed., 2011) and there are multiple case report on skin sensitization potential of

this substance (SCCS 2011).

May cause sensitization by skin contact.

Germ Cell Mutagenicity

p-AMINOPHENOL Negative results were reported by in vivo domestic lethal test

in rat and in vitro gene mutation test, but positive results are reported by in vivo micronucleus test in mouse, in vitro mouse lymphoma test and chromosome aberration test (Existing chemical toxicity database of Ministry of Health, Labor and Welfare access on May 2017, SIDS 2010, Patty 6th 2012, NTP

DB access on May 2017)

Carcinogenicity No information available

Reproductive Toxicity

ISOPROPYL ALCOHOL Two generation test on rat by oral exposure showed decrease in

copulation rate on parent and decrease in weight and increase

in death rate (PATTY 6th, 2012 and SIDS (2002)).

p-AMINOPHENOL In a simple reproductive toxicity test by forced oral administration using rats, death of parental animals was seen

(male 4/12 and female 2/12). Regression stop of sex cycle, extension of gestation periods, poor delivery rate and nursing behaviors were seen in parental rats that showed suppression on weight gain at a dose of 500 mg/kg/day. Its offsprings showed increased stillbirth, lower fertility rate and survival rate within first 4 days. (Existing chemical toxicity database of Ministry of Health, Labor and Welfare access on May 2017,

SIDS 2010, SCCS 2011).

On the other hand, the developmental toxicity test administered a dose mixed feeds to a pregnant rats on 0 to 20th days,

increase in fetal death after implantation at dose lower than the dose showing suppression of weight gain to the mother animals was seen, but fetus did not show increase in teratogenesis although it showed skeletal morphogenesis and undeveloped renal papilla due to growth retardation (SIDS 2010, Risk Assessment by Ministry of the Environment Vol. 5: Temporary

Hazard Assessment Sheet 2006).

However, as a result of forced oral administrations during the

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organ formation periods of pregnant rat, the mother animal showed suppression of weight gain at does greater than 85 mg/kg/day and teratogenicity in fetus, such as skeletal malformations, asthma, hydrocephalus, at dose of 250 mg/kg/day (SCCS 2011). A test administered forcefully single oral dose to pregnant rats at 11th day of pregnancy showed abnormality in their tail at a dose showing the suppression of weight gain on mother animals (SIDS 2010, Risk Assessment by Ministry of the Environment Vol. 5: Temporary Hazard Assessment Sheet 2006). There was a report that pregnant hamsters administered showed no teratogenicity by oral administration but external malformation such as cerebral aneurysms and ocular or tail malformations were seen (SIDS 2010, Patty 6th, 2012, SCCS 2011, Risk Assessment by Ministry of the Environment Vol. 5: Temporary Hazard Assessment Sheet 2006).

STOT – Single Exposure

4-NITRO-o-PHENYLENEDIAMI

May cause respiratory irritation.

AMMONIUM HYDROXIDE

There is known neurological effect due to oral and dermal exposure, which normally limited to blurred vision on topically applied region, but severe exposure causes increase in concentration of blood ammonia, attack, coma, nonspecific diffuse brain disorder, loss in muscle strength, decreased deep tendon reflex, loss of consciousness, and death (ATSDR, 2004). This substance has a respiratory irritation and causes severe irritation and pain on airway mucosa. Also, severe corrosive effects are known for mouth, throat and stomach by oral route (HSDB, 2014).

ISOPROPYL ALCOHOL

This substance showed systematic hazardous effect including the central nervous depression such as lethargy, coma and respiratory depression, irritation on the alimentary canal, effect on the circulatory system such as blood pressure, body temperature decrease, and abnormal cardiac rhythm (SIDS (2002), EHC 103 (1990)).

PARAFFIN

Wax fume is mild irritant on eyes, nose, and throat

(PATTY5th, 2001)

RESORCINOL

This substance has multiple human poisoning cases. After using ointment or cream (50% of this substance, 100 g) for the treatment of skin diseases, methemoglobinemia, cyanosis, convulsions due to loss of consciousness, tremor, convulsion, mydriasis, confusion, amnesia, disorientation were observed. In oral ingestion and percutaneous absorption poisoning cases of infants, burning sensation, convulsions, central nervous system disorder (dizziness, confusion, somnolence, disorientation, disorientation, memory loss, tremor), red blood cell change (methemoglobinemia, hemolytic anemia, hemoglobinuria, cyanosis), etc. were observed (ACGIH (7th, 2001), CICAD 71 (2006), IARC 71 (1999), PATTY (6th, 2012), DFGOT Vol. 20 (2003)). In experimental animals, in oral administration on rats salivation, hyperexcitability, tachypnea, ptosis, lethargy, abnormal gait, lying position, tremor, dyspnea, tremor, convulsion, sedation, tonic chronic convulsion, cyanosis, etc. were reported (SIDS (2009), ACGIH (7th, 2001), DFGOT Vol. 20 (2003), PATTY (6th, 2012), CICAD 71 (2006)).

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STOT - Repeated Exposure

ISOPROPYL ALCOHOL Vapor exposure of this substance on rat for 4 month showed

decrease in number of leucocyte at 100 mg/m³, and pathologic effect on organs of respiration such as lung and respiratory tract, liver and spleen at 500 mg/m³ (EHC 103 (1990)).

MINERAL OIL Effects on liver and mesenteric node by repeated oral exposure

test using rat (IUCLID, 2000) and on lung due to aerosol

exposure on rat (US HPVIS, 2011).

There is no clear report on humans. p-AMINOPHENOL

In the 28-day repeated dose toxicity study by oral gavage using rats, brown urine, urinary sediment epithelial cells, absolute and relative weight values of kidney, basophilic tubule were seen at 100 mg/kg/day which is equivalent to 31 mg/kg/day for 90-day study, and lower red blood cells, hematocrit value and hemoglobin concentration, a high value of reticulocyte count, a

liver weight increase, a white streak at the kidney

corticosterum, spleen extramedullary hematopoiesis, and spleen hemosiderin pigment were seen at 500 mg/kg/day which is equivalent to 156 mg/kg/day for 90-day study (Existing chemical toxicity database of Ministry of Health, Labor and Welfare access on May 2017, SIDS 2010, Ministry of the Environment Risk Assessment Vol. 5: Temporary Hazard Assessment Sheet 2006).

In addition, in a 6-month repeated oral does toxicity study using rats, nephropathy was sheen at dose greater than 35 mg/kg/day and suppression of weight gain, decrease in number of red blood cells and concentration of hemoglobin (Ministry of the Environment Risk Assessment Volume 5: Temporary Hazard Assessment Sheet 2006, PATTY 6th 2012).

Aspiration Hazard

MINERAL OIL Inhalation of oil or liquid to lung may cause lipid or chemical

pneumonia and/or lipid granuloma.

Information on the Likely Routes of Exposure

Specific test data for the substance or mixture is not available. Inhalation

May cause irritation of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available.

Expected to be an irritant based on components. Severely irritating to eyes. Cause serious eye damage. May cause burns.

May cause irreversible damage to eyes.

Specific test data for the substance or mixture is not available. Skin contact

Ingestion may cause irritation based on components. Irritating to

skin. Prolonged contact may cause redness and irritation.

Specific test data for the substance or mixture is not available. Ingestion

> Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed (based on components). Erythema (skin redness). May cause redness and tearing of the

Symptoms related to the Physical, Chemical and Toxicological

Characteristics

eyes. May cause blindness. Burning, itching, rushes and/or

Delayed, Immediate, and Chronic

Effects from Short and Long Term

Exposure

May cause sensitization of susceptible persons. May cause

sensitization by skin contact.

Carcinogenicity The table below indicates whether each agency has listed any

ingredient as carcinogen.

	ACCITI			0.077.1
l Chemical Name	A CGIH	IARC	NTP	OSHA
i Chemical Name	ACOIII	1/1/1//	1111	USHA

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ISOPROPYL ALCOHOL	A4	Group 3	-	-
RESORCINOL	A4	Group 3	-	-
4-NITRO-o-PHENYLENEDIAMINE	-	Group 3	-	-
MINERAL OIL	-	Group 3	-	-

ACGIH: A1 – Confirmed human carcinogen, A2 – Suspected human carcinogen, A3 – Confirmed animal carcinogen with unknown relevance to humans, A4 – Not classifiable as a human carcinogen, A5 – Not suspected as a human carcinogen

IARC: International Agency for Research and Cancer (Group 1 – Carcinogenic to humans, Group 2A – Probably Carcinogenic to humans, Group 2B – Possibly carcinogenic to humans, Group 3 – Not classifiable as to carcinogenicity in humans, Group 4 – Probably not carcinogenic to humans)

NTP: National Toxicology Program (NA = none assigned, Known = Known to be a human carcinogen,

RAHC = Reasonably anticipated to be a human carcinogen)

Other Information : No information available.

Section 12: Ecological Information

Toxicity on Aquatic Organisms

AMMONIUM HYDROXIDE LC50 (Mysidopsis bahia, 96 hrs.) = 2.81 - 98.9 mg total NH₃/L

(SIDS, 2007)

AMMONIUM BICARBONATE LC50 (96 hrs., Oncorhynchus mykiss)= $17300 \mu g/L$ BEHENTRIMONIUM CHLORIDE EC50(Daphnia magna, 48 hrs.) = 0.16 mg/kg EC50 (Daphnia magna, 48 hrs.) = 1.28 mg/L

POLYQUATERNIUM-4 No information available

FRAGRANCE
P-AMINOPHENOL
SCHOOL
NO specific information given on the SDS from manufacturer.
EC50 (Pseudokirchneriella subcapitata, 72 hrs.) = 0.1 mg/L
NOEC (Pseudokirchneriella subcapitata, 72 hrs.) = 0.025 mg/L

Toxicity on Terrestrial Organisms : No information available.

Persistence and Degradability :

BEHENTRIMONIUM CHLORIDE BOD=0 %

MINERAL OIL Persistent (IUCLID, 2000)

RESORCINOL BOD = 66.7%

POLYQUATERNIUM-4 No information available

p-AMINOPHENOL BOD = 6 %

Bioaccumulative Potential

BEHENTRIMONIUM CHLORIDE Low bioaccumulation

MINERAL OIL Log Pow > 6 (IUCLID, 2000)

RESORCINOL $\log \text{Kow} = 0.8$

POLYQUATERNIUM-4 No information available

p-AMINOPHENOL BCF = 46

Mobility in Soil : No information available.

Other Adverse Effects : No information available.

Section 13: Disposal Considerations

Product/Packaging Disposal : This material, as supplied, is not a hazardous waste

according to Federal regulation (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local

regulations for additional requirements.

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Waste Treatment-Relevant Information Sewage Disposal-Relevant Information Other Disposal Recommendation No information available.No information available.

: Dispose of contents/containers in accordance with local

regulation (refer to Section 15).

Section 14: Transport Information

cetton 14. ITansport Information			
	DOT/TDG	IATA/ICAO	IMDG/IMO
UN Number			
UN Proper Shipping Name	Not Regulated	Not Regulated	Not Regulated
Transport Hazard Classes	Not Regulated		
Packing Group			

DOT: US Department of Transportation

TDG: UN model regulation of Transport of Dangerous Goods

IATA/ICAO: International Air Transport Association/International Civil Aviation Organization IMDG/IMO: International Maritime Dangerous Goods/International Maritime Organization

Environmental Hazards : No information available.

Special Precautions for User : No information available.

Transport in Bulk According to ANNEX : No information available.

II of MARPOL 73/78 and IBC Code

Section 15: Regulatory Information

Safety, Health, and Environmental Regulations Specific for the Product

International chemical inventories

Toxic substances control act (TSCA) : All components of this product are either listed or are

exempt on the TSCA inventory.

Domestic Substance list (DSL) : Substances comply or are exempt.

US Federal Regulation

Title III of the Superfund Amendments

and Reauthorization act of 1986

(SARA 313)

Section 313 of Title III of the Superfund Amendments and Reauthorization act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the act and title 40 of the Code of Federal

Regulations (CFR), Part 372.

	Regulations (C	$_{\rm J}\Gamma { m K}{ m J}, 1$	rait 3/2.	
Chemical Name		SARA	A 313 – Threshold	values (%)
AMMONIUM HYDROXIDE		1.0 as	s ammonia	
ISOPROPYL ALCOHOL		1.0		
SARA 311/312 Hazard Category	: Acute health h	nazard		Yes
	Chronic health	ı hazaı	rd	No
	Fire hazard			No
	Sudden release	e of pr	essure hazard	No
	Reactive hazar	rd		No
Clean Water Act (CWA)	: This product c	ontain	ns the substances w	which are regulated as
	pollutant pursi	uant to	the Clean Water A	Act (40 CFR 122).
Clean Air Act (CAA)	: This product d	loes no	ot contain substanc	e which is regulated
	as pollutant pu	ırsuant	t to the Clean Air A	Act (40 CFR 50 - 99).
Comprehensive Environmental	: This material,	as sup	pplied, contains on	e or more substances
Response Compensation and Liability	regulated as ha	azardo	ous substance unde	r the Comprehensive
Act (CERCLA)	Environmenta	l Resp	onse Compensatio	on and Liability Act
	(40 CFR 302).			
Hazardous Substance	Statutory Cod	e* F	RCRA Waste No.	Final RQ Pounds
AMMONILIM HVDROVIDE	1		_	1000 lb (454 kg)

Hazardous Substance	Statutory Code*	RCRA Waste No.	Final RQ Pounds
AMMONIUM HYDROXIDE	1	-	1000 lb (454 kg)
AMMONIUM BICARBONATE	1	-	5000 lb (2270 kg)
RESORCINOL	1, 4	U201	5000 lb (2270 kg)

^{*} According to 40 CFR 302, The "Statutory Code" column indicates the statutory source for designating each substance as a CERCLA hazardous substance:

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- "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act,
- "2" indicates that the source is section 307(a) of the Clean Water Act,
- "3" indicates that the source is section 112 of the Clean Air Act, and
- "4" indicates that the source is section 3001 of the Resource Conservation and Recovery Act (RCRA).

US State Regulations

California Hazardous Waste Code : 135 (unspecified aqueous solution)

This product contains one or more substances that are listed with the state of California as hazardous waste.

,, as	
Chemical Name	California Hazardous Waste Code
AMMONIUM HYDROXIDE	X, C
ISOPROPYL ALCOHOL	X, I

California Hazardous Waste Code: X – Toxic, C – Corrosive, I – Ignitable, R - reactive

California Proposition 65 : This product does not contain any Proposition 65 chemicals.

US State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
AMMONIUM HYDROXIDE	X	X	X	-	X
AMMONIUM BICARBONATE	X	X	X	-	X
LANOLIN	-	-	X	X	-
PARAFFIN	X	X	X	X	-
MINERAL OIL	X	X	X	X	-
RESORCINOL	X	X	X	X	X
ISOPROPYL ALCOHOL	X	X	X	X	-

Section 16: Other Information

NFPA (National Fire Protection	: Health hazard	3
Association Code)	Flammability hazard	0
	Instability hazard	0
	Special hazards	COR
HMIS (Hazardous Materials	: Health	3
Identification System)	Flammability	0
	Physical hazard	0
	Personal protection	X

Reference

- 1. Globally Harmonized System of Classification and Labeling of Chemicals Revision 5, 2013
- 2. National Institute of Technology and Evaluation (http://www.nite.go.jp/en/index.html)
- 3. SDS provided from raw material manufactures
- 4. United States Code (http://uscode.house.gov/browse.xhtml)
 - a) Title 21 Food and Drugs Chapter 9 Federal Food, Drug, and Cosmetic Act
 - b) Title 33 Navigation and Navigable Waters Chapter 26 Water Pollution Prevention and Control
 - c) Title 42 The Public Health and Welfare Chapter 85 Air Pollution Prevention and Control
 - d) Title 42 The Public Health and Welfare Chapter 103—Comprehensive Environmental Response, Compensation, and Liability
- 5. Code of Federal Regulation (https://www.gpo.gov/)
 - a) 21 CFR parts 700 799 Cosmetics
 - b) 40 CFR Protection of Environment
- 6. US Right-to-Know Regulation
 - a) New Jersey administrative code Title 8 Health Chapter 59 Work and community right to know act rules Appendix A and B
 - b) New Jersey Register Volume 42, Issue 15, 42 N.J.R. 1709(a), August 2, 2010
 - c) Code of Massachusetts Regulations 105 CMR 670.000 Right to know
 - d) The Pennsylvania Code Title 34 Labor and Industry Chapter 323 Hazardous Substance List

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e) State of Rhode Island General Laws Chapter 28-21 Hazardous Substances Right-to-Know Act

- f) Rhode Island Hazardous Substance List (http://www.dlt.ri.gov/occusafe/pdfs/HazardousABC.pdf)
- g) Illinois Chemical Safety Act (430 ILCS 45)
- h) Hazardous Materials Emergency Act (430 ILCS 50)
- i) Illinois Emergency Planning and Community Right to Know Act (430 ILCS 100)
- 7. Domestic Substance List (http://www.ec.gc.ca/LCPE-CEPA/default.asp?lang=En&n=5F213FA8-1)
- 8. TSCA Chemical Substance Inventory (https://www.epa.gov/tsca-inventory)
- 9. International Agency for Research on Cancer (http://www.iarc.fr/)
- 10. American Conference of Governmental Industrial Hygienists (http://www.acgih.org/)
- 11. US Environmental Protection Agency (https://www3.epa.gov/)
- 12. US Department of Labor, Occupational Safety and Health Administration (https://www.osha.gov/)
- 13. The National Institute for Occupational Safety and Health (http://www.cdc.gov/niosh/about/default.html)
- 14. US Department of Health and Human Services, National Toxicology Program (https://ntp.niehs.nih.gov/)
- 15. US Department of Transportation (https://www.transportation.gov/)
- 16. International Air Transport Association (http://www.iata.org/Pages/default.aspx)
- 17. International Civil Aviation Organization (http://www.icao.int/Pages/default.aspx
- 18. International Maritime Organization (http://www.imo.org/en/Publications/IMDGCode/Pages/Default.aspx)
- 19. California Environmental Protection Agency (http://oehha.ca.gov/)
- 20. National Fire Protection Association (http://www.nfpa.org/)

Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.