KOLON INDUSTRIES

Safety Data Sheet

English ver.14
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1. IDENTIFICATION

1.1 Product identifier

○ **Product Name**
SUKOREZ® SU-210

○ **Chemical family**
Hydrogenated hydrocarbon resin

○ **CAS number**
69430-35-9

1.2 Recommended use of the chemical and restrictions on use

○ **Recommended use**
Additive for adhesives, paints, coatings, inks

○ **Restrictions on use**
Used for recommended use

1.3 Details of the supplier of the safety data sheet

○ **Company name(Manufacturer)**
KOLON INDUSTRIES

○ **Address**
9th FL, One&Only tower, Magokdong-ro 110, Gangseo-gu, Seoul, Korea(07793)

○ **Emergency Telephone**
(82)-2-3677-6124

2. HAZARDS IDENTIFICATION

2.1 GHS classification of the substance/mixture

Not classified according to OSHA 29 CFR 1910.1200

2.2 Label elements

Not applicable

2.3 Other hazards(NFPA)

Product name	Health	Flammable	Reaction
SUKOREZ® SU-210	1	1	0

(※ 0-Lack, 1-Low, 2-Moderate, 3-High, 4-Very High)

3. COMPOSITION/INFORMATION ON INGREGIENTS

3.1 Substances

Chemical name	Trade Name and Synonyms	CAS number	Weight % range
Hydrogenated hydrocarbon resin	Hydrocarbons,C6-C20, Polymer	69430-35-9	>99.2
Stabilizer	-	Proprietary	<0.8

4. FIRST AID MEASURES

4.1 Eye contact

Flush eyes with amount of water for at least 15 minutes.
Get medical attention immediately.

4.2 Skin contact

Get medical attention if needed.
Dry and wash thoroughly contaminated clothing and shoes before reuse.
Remove contaminated clothing and shoes. Wash immediately skin.
With soap and water for at least 15 minutes.

4.3 Inhalation

Give artificial respiration if victim is not breathing.
Move victim to non-contaminated place if side effect occurred.
Get medical attention immediately.

4.4 Ingestion

Get medical attention if swallowed amount of substances.

4.5 Other notes for physician

There is not specific antidote. Take functionally measures according to symptoms.

5. FIRE FIGHTING MEASURES

5.1 Suitable(and unsuitable) extinguishing media

○ **Suitable extinguishing media**

Dry chemical, CO_2, water spray, regular foam

○ **Unsuitable extinguishing media**
Not available
○ **In case of major fire and large quantities**
Use regular extinguishing agent and fine water spray.

5.2 Specific hazards arising from the chemical
○ **Thermal decomposition products**
Carbon oxides, nitrogen oxides
○ **Fire and explosive hazard**
It could be a slight fire hazard.

5.3 Special protective equipment and precautions for fire-fighters
Move containers from fire area if you can do it without risks.
Do not scatter spilled material with high pressure water streams.
Mank an embankment for further processing.
Use extinguishing agent suitable for type of surrounding fire.
Avoid inhalation of the substance or combustion products.
Stay upwind and keep out of low areas.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Keep away from waterways and sewers.
Isolate exposed area.
Keep unauthorized personnel away.
Move materials to suitable containers for later disposal.

6.2 Environmental precautions and protective procedures
○ **Atomosphere**
Not available
○ **Land**
Not available
○ **Underwater**
Do not release spillage into sewers.

6.3 Methods and material for containment and cleaning up
○ **Small spill**
Dispose waste as waste synthesis resin(general waste).

○ **Large spill**
Collect and then recycle or dispose as a waste resin(general waste).

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Prevent skin and eye contact
Avoid contact in the molten state by heat and vapor inhalation.
When static electricity generates, remove by grounding, cleaning work space, and using articles preventing electrification.

7.2 Conditions for safe storage

Minimize generation and accumulation of dust store in a cool, dry, well-ventilated area.
Avoid contact with straight sunlight.
Store and use by regulation of central government and local self-government.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

○ **Exposure limits**
Not available
○ **ACGIH TLV**
Not available
○ **OSHA PEL**
Not available
○ **Biological limit values(BLV)**
Not available

8.2 Appropriate engineering controls

Provide local exhaust ventilation system or other engineering controls to keep the airborne concentrations of vapor below their respective threshold limit value.
Check legal suitability of exposure level.

8.3 Personal protective equipment

○ **Respiratory protection**
Wear NIOSH or european standard EN 149 approved full or half face piece (with goggles)
respiratory protective equipment when necessary.
Air respirator are required in case of high frequency use or severe exposure

Air-purifying respirator(high efficiency particulate absorber)
In case of unknown concentrations or urgent risk of life/health
Air-line mask(combination airline breathing mask)
Air-breathing apparatus(full facepiece)

○ **Eye and face protection**
Wear safety glasses(goggles) to protect eyes from dust.

○ **Hand protection**
Wear appropriate protective gloves to prevent exposure of skin.

○ **Body protection**
Wear appropriate protective clothing to prevent exposure of skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Physical state
Solid

9.2 Color
Water white

9.3 Odor

○ **Odor**
Odorless

○ **Odor threshold**
Not detected

9.4 Melting point/freezing point
107~114℃(Softening point)

9.5 Boiling point or initial boiling point and boiling range
Not available

9.6 Flammability
Not available

9.7 Upper/lower limit on flammability or explosive limits
Not applicable

9.8 Flash point
>270℃

9.9 Auto-ignition temperature

>400℃

9.10 Decomposition temperature

Not available

9.11 pH

Not available

9.12 Kinetic viscosity

Not applicable

9.13 Solubility

Insoluble

9.14 Partition coefficient n-octanol/water(Log Kow)

Not applicable

9.15 Vapor pressure

Not applicable

9.16 Density and/or relative density

1.07~1.10

9.17 Relative vapor density

Not applicable

9.18 Particle characteristics

Particle size : 3 - 7 MM

10. STABILITY AND REACTIVITY

10.1 Reactivity

It will not occur polymerization reaction.

10.2 Chemical stability

Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions
Not available

10.4 Condition to avoid
Avoid heat, flames, sparks and other sources of ignition.

10.5 Incompatible materials
Strong oxidizing agent

10.6 Hazardous decomposition products
Carbon oxides

11. TOXICOLOGICAL INFORMATION

11.1 Information on the likely routes of exposures
○ **Inhalation**
No inhalation effects through respiratory system.
○ **Skin contact**
No effect on skin contact.
○ **Eye contact**
No effect on eye contact.
○ **Ingestion**
No ingestion effect through mouth.

11.2 Health hazard information
○ **Acute toxicity**
Oral : Not classified ATEmix = 6,977mg/kg
(Hydrogenated hydrocarbon resin : LD50 = 7,000mg/kg(mammal))
(Antioxidant : LD50>5,000mg/kg(rat))
Dermal : Not classified
(99.2% of this product consist of ingredients of unknown material)
(Hydrogenated hydrocarbon resin : Not available)
(Antioxidant : LD50>3,160mg/kg(rabbit))
Inhalation(dust/mist) : Not classified
(99.2% of this product consist of ingredients of unknown material)
(Hydrogenated hydrocarbon resin : Not available)
(Antioxidant : LD50(4hr)>1.95mg/(rat))
○ **Skin corrosion/irritation**
Not classified

(0.8% of this product consist of ingredients of unknown material)
(Hydrogenated hydrocarbon resin : Not classified)
(Skin irritation test : not irritative based on primary irritation index = 0)
(Antioxidant : Not available)

○ **Serious eye damage/irritation**
Not classified
(99.2% of this product consist of ingredients of unknown material)
(Hydrogenated hydrocarbon resin : Not available)
(Antioxidant : in test on eye irritation with rabbits, mild irritation was observed.)

○ **Respiratory sensitization**
Not available

○ **Skin sensitization**
Not classified
(99.2% of this product consist of ingredients of unknown material)
(Hydrogenated hydrocarbon resin : Not available)
(Antioxidant : The maximization test using guinea pigs resulted in negative.)

○ **Carcinogenicity**
Not available
IARC : Not available
NTP : Not available
OSHA : Not available
WISHA : Not available
ACGIH : Not available

○ **Germ cell Mutagenicity**
Not available

○ **Reproductive toxicity**
Not classified
(99.2% of this product consist of ingredients of unknown material)
(Hydrogenated hydrocarbon resin : Not available)
(Antioxidant : IN F2 reproductive toxicity test with rats for 10 months (dose : 0, 1,000, 3,000, 10,000ppm), NOAEL were 10,000 ppm.(GLP))

○ **Specific target organ toxicity(single exposure)**
Not available

○ **Specific target organ toxicity(repeat exposure)**
Not classified
(99.2% of this product consist of ingredients of unknown material)
(Hydrogenated hydrocarbon resin : Not available)
(Antioxidant : NOAEL=10,000ppm(250mg/kg dw/day). When beagles were exposed repeatedly at doses of 0, 1,000, 3,000 and 10,000 ppm for 90 days, any toxic effects were not observed at the highest dose of 10,000ppm(1,500mg/kg bw/day)

○ **Aspiration hazard**
Not available

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

○ **Fish**
Not classified
(99.2% of this product consist of ingredients of unknown material)
(Hydrogenated hydrocarbon resin : Not available)
(Antioxidant : 96hr LC50>100mg/l)

○ **Crustacea**
Not classified
(99.2% of this product consist of ingredients of unknown material)
(Hydrogenated hydrocarbon resin : Not available)
(Antioxidant : 24hr LC50>86mg/l (OECD TG 202, GLP))

○ **Algae**
Not classified
(99.2% of this product consist of ingredients of unknown material)
(Hydrogenated hydrocarbon resin : Not available)
(Antioxidant : 72hr EC50>100mg/l (DIRECTIVE 87/302/EEC, GLP))

12.2 Persistence and degradability

○ **Persistence**
Not readily degradable. And there were persistence possibility with insoluble.
(Hydrogenated hydrocarbon resin : Not available)
(Antioxidant : log Kow=23(25℃) (DIRECTIVE 84/449/EEC, A6, GLP))

○ **Degradability**
Not available

12.3 Bioaccumulative potential

○ **Bioaccumulation**
Not available
(99.2% of this product consist of ingredients of unknown material)
(Hydrogenated hydrocarbon resin : Not available)
(Antioxidant : Bioaccumulative potential is low as a bioconcentration factor at 0.1mg/l based on the bioaccumulative test using carp(cyprinus carpio) (bcf<2.3))

○ **Biodegradation**
Non-biodegradable

(99.2% of this product consist of ingredients of unknown material)
(Antioxidant : degraded 0% in the biodegradation test for 4 weeks.)
(OECD TG031C))

12.4 Mobility in soil

Not available

12.5 Other hazard effects

Not available

SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 Disposal method

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

13.2 Disposal precaution

Consider the require attentions in accordance with waste treatment management regulation.

SECTION 14 : TRANSPORT INFORMATION

14.1 UN number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class

Not applicable

14.4 Packing group

Not applicable

14.5 Marine pollutant

Not applicable

14.6 Special safety response for transportation or transportation measure

○ **Emergency measures in case of fire**
Not applicable
○ **Emergency measures in case of leakage**
Not applicable
○ **Transport regulations according to ADR, RID, ADN, IMDG, IATA**
Not applicable

SECTION 15 : REGULATORY INFORMATION

15.1 U.S.A Management information

○ **OSHA(29CFR1910.119)**
Not regulated
○ **OSHA(29CFR1910.1200)**
Not regulated
○ **CERCLA 103(40CFR302.4)**
Not regulated
○ **EPCRA 302(40CFR355.3)**
Not regulated
○ **EPCRA 304(40CFR355.4)**
Not regulated
○ **EPCRA 313(40CFR372.65)**
Not regulated

15.2 EU classification

○ **Classification**
Not available
○ **Risk phrases**
Not available
○ **Safety phrases**
Not available
○ **EU RoHS Regulation(DIRECTIVE 2002/96/EC)**
The four heavy metals and brominated flame retardants were not detected.

15.3 Sara classification

○ **SARA hazard categories, SARA sections 311/312(40CFR370.21)**
None
○ **SARA section 313(40CFR372.65)**
None

15.4 Substance of Roterdame protocol

Not regulated

15.5 Substance of Stockholme protocol

Not regulated

15.6 Substance of Montreal protocol

Not regulated

15.7 Inventory status

Country	Inventory	Status
United states	TSCA	Listed
Canada	DSL	Listed
Europe	EINECS	Listed
Australian	AICS/NICNAS	Listed
Japan	MITI	Listed
Korea	KECI	Listed
Philippines	PICCS	Listed
China	IECSC	Listed

16. OTHER INFORMATION

16.1 Information source and references

Korea occupational health&safety agency(SDS)
(http://www.kosha.or.kr)
The product analysis conducted by research institute of KOLON INDUSTRIES, Inc. (chemical)
Korea testing and research institute for chemical industry skin irritation test data(TBH-000125(2004), test method : the notice 1999 of korea food and drug administration
Korea testing and research institute for chemical industry hazardous chemical substance analysis data
The SDS data published by antioxidant manufacturer
Chemical risk information platform(CHRIP) - (http://www.safe.nite.go.jp/english/db.html)
Quantitative structure activity relation(QSAR)
International uniform chemical information database(IUCLID) - (http://ecb.jrc.it/esis)

16.2 Issue date

2004-04-01

16.3 Revision number and Last date revised

○ **Number of revised**
14

○ **Date of last revision**
2024-09-23

The information contained herein is to the best of our knowledge and belief accurate. Since sds is to provide information on the health/safety/environment to users of the substance, data written here do not mean to ensure properties of matter or spec.