

Safety Data Sheet

ReMARKable DRY-ERASE WB – RESIN

Revision date: 2017/05/22

1. Identification

Product identifier used on the label

ReMARKable DRY-ERASE WB – RESIN

Recommended use of the chemical and restriction on use:

Dry-Erase Coating

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

TSC Coatings LLC
13111 Induran Drive
Bakersfield, CA 93314

800-936-2159

Emergency telephone number

CHEMTREC: 1-800-424-9300

Other means of identification

Chemical family: Acrylic Polymer in Water

2. Hazards Identification

According to 49 CFR Criteria & Hazardous Products Regulations (HPR) (SOR/2015-17)

Skin Sens. 1B Skin sensitization

Pictogram:



Signal Word:
Warning

Hazard Statement:

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280 Wear protective gloves.

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

P273 Avoid release to the environment.

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

Precautionary Statements (Response):

P333 + P311 If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician.

P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.

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

P391 Collect spillage.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

According to Controlled Products Regulations (CPR) (SOR/88-66)

Emergency overview

SENSITIZER.

May cause sensitization by skin contact.

The statements are based on the properties of the individual components.

3. Composition / Information on Ingredients

Components	CAS Number	Concentration (Weight)
Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-[3-[3-(2 H- benzotriazol-2-yl)-5-(1,1- dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-	104810-47-1	< 3 %
Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-	104810-48-2	< 3 %
bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	41556-26-7	< 3 %
Glycol Ether DPNP	29911-27-1	< 2%
Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	82919-37-7	< 1 %
Ammonia	7664-41-7	< 1 %
Proprietary (Non-hazardous)	N/A	> 50 %

4. First-Aid Measures

Description of first aid measures

General advice:

Immediately remove contaminated clothing.

If inhaled:

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Remove to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

If on skin:

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

If in eyes:

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician

If swallowed:

Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Most important symptoms and effects, both acute and delayed:

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: Preferable: Dry chemical, CO2 or water spray.

Unsuitable extinguishing media: Solid water jet ineffective as extinguishing medium

Special hazards arising from the substance or mixture

Hazards during fire-fighting: No information available

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Do not discharge into drains/surface waters/groundwater..

7. Handling and Storage

Precautions for safe handling

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate

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ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep from freezing.

Storage Temperature: 15 – 25 C

Storage Area:

Protect from freezing. Store in a cool area. Keep out of direct sunlight. Store in a dry area. Store in a dark area.

INCOMPATIBLE MATERIALS: Water reactives, Oxidizing agents

8. Exposure Controls/Personal Protection

Ammonia (7664-41-7)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 25 ppm

US. ACGIH Threshold Limit Values

Short Term Exposure Limit (STEL): 35 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Permissible exposure limit: 50 ppm, 35 mg/m³

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Engineering Measures

Provide readily accessible eye wash stations and safety showers.

Provide natural ventilation

Personal protective equipment

Respiratory protection:

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Avoid inhalation of mists. Contact

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with eyes and skin must be avoided.

Occupational Exposure limit(s)

N/A

9. Physical and Chemical Properties

Form:	liquid
Odor:	Slightly sweet
Color:	White
pH value:	8.0-9.0
Melting point:	No data available
Boiling point:	100 °C
Flash point:	N/A
Flammability:	N/A
Lower explosion limit:	Not applicable
Upper explosion limit:	Not applicable
Vapor pressure:	No data available
Viscosity, Dynamic	500-1000 CPS
Solubility in Water	Yes
Evaporation rate:	Not determined
Volatile Organic Compounds:	< 50 g/l (per AQMD)

10. Stability and Reactivity

Reactivity:
No Data Available

Chemical Stability:
Stable under normal conditions.

Conditions to avoid:
Extreme temperatures and direct sunlight

Materials to avoid:
Water reacts Oxidizing agents

Hazardous decomposition products:
Carbon monoxide. Carbon dioxide (CO₂), Hydrocarbons

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

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Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Oral

Type of value: LD50 Species: rat
Value: > 5,000 mg/kg (OECD Guideline 401)
No mortality was observed.

Inhalation

Type of value: LC50 Species: rat
Value: > 5.8 mg/l (OECD Guideline 403) Exposure time: 4 h
No mortality was observed.

Dermal

Type of value: LD50 Species: rat
Value: > 2,000 mg/kg (OECD Guideline 402) No mortality was observed.

Assessment other acute effects Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Irritation / corrosion

Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes.

Skin

Species: rabbit Result: non-irritant
Method: OECD Guideline 404

Eye

Species: rabbit Result: non-irritant
Method: OECD Guideline 405

Sensitization

Assessment of sensitization: Caused skin sensitization in animal studies.

Guinea pig maximization test Species: guinea pig

Result: sensitizing
Method: OECD Guideline 406

Aspiration Hazard not applicable

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: The substance may cause damage to the liver after repeated ingestion. Effect found in rodents only. The relevance to humans is questionable. Due to the species specific mode of action, the effects are not expected to occur in humans.

Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in studies with mammals.

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Carcinogenicity

Assessment of carcinogenicity: No data was available concerning carcinogenic activity.

Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Teratogenicity

Assessment of teratogenicity: In animal studies the substance did not cause malformations.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Acutely toxic for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. Toxic to aquatic organisms based on long-term (chronic) toxicity study data.

< 10% Additives:

Toxicity to fish

LC50 (96 h) 2.8 mg/l, *Oncorhynchus mykiss* (OECD 203; ISO 7346; 84/449/EEC, C.1, static)

LC50 (96 h) 0.97 mg/l, *Lepomis macrochirus* (OECD Guideline 203) LC50 (96 h) 7.9 mg/l, *Oncorhynchus mykiss* (OECD Guideline 203)

LC50 (96 h) 0.9 mg/l, *Brachydanio rerio* (OECD Guideline 203, semistatic)

The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.

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Aquatic invertebrates

EC50 (48 h) 4 mg/l, *Daphnia magna* (static)

The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. Nominal concentration.

Aquatic plants

EC50 (72 h) > 100 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static) Nominal concentration.

EC10 (72 h) 10 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static) Nominal concentration.

EC50 (72 h) 1.68 mg/l (growth rate), *Desmodesmus subspicatus* (OECD Guideline 201, static) The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous

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solution prepared with solubilizers has been tested.

Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d) 0.78 mg/l, *Daphnia magna* (OECD Guideline 202, part 2, semistatic)
The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. Nominal concentration.

Soil living organisms

Toxicity to soil dwelling organisms:

LC0 (14 d) > 1,000 mg/kg, *Eisenia foetida* (OECD Guideline 207, artificial soil) No effects at the highest test concentration.

No observed effect concentration (56 d) 100 mg/kg, *Eisenia foetida* (OECD Guideline 222, artificial soil)
No effects at the highest test concentration. Toxicity to terrestrial plants
Study scientifically not justified.

Other terrestrial non-mammals Study scientifically not justified.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms OECD Guideline 209 static
activated sludge, domestic/EC50 (3 h): > 1,000 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Not readily biodegradable (by OECD criteria). Moderately/partially biodegradable. Elimination information
24 % CO₂ formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge, domestic, non-adapted)

1 % C-14 labelling (100 d) (OECD 308) (aerobic, sediment)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

0.2 % C-14 labelling (100 d) (OECD 308) (anaerobic, sediment)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Assessment of stability in water Study scientifically not justified.

Information on Stability in Water (Hydrolysis) Study technically not feasible.

Bioaccumulative potential

Assessment bioaccumulation potential

Does not significantly accumulate in organisms.

Bioaccumulation potential

Bioconcentration factor: 34 (502 h), *Oncorhynchus mykiss* (OECD-Guideline 305)

Mobility in soil

Assessment transport between environmental compartments Adsorption to solid soil phase is expected.

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Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control

Resin:

Biodegradation

60 %, Exposure time: 28 d, i.e. not readily degradable

Acute and Prolonged Toxicity to Fish

LC50: > 100 mg/l (Danio rerio (zebra fish), 96 h) Ecotoxicological reports on a comparable product

Acute Toxicity to Aquatic Invertebrates

EC50: 70.7 mg/l (Daphnia magna (Water flea), 48 h) Studies of a comparable product.

Toxicity to Microorganisms

EC50: > 10,000 mg/l, (activated sludge)

Ecotoxicological reports on a comparable product

13. Disposal Considerations

Dispose of in a licensed facility. Do not discharge into waterways or sewer systems without proper authorization.

Container disposal:

Dispose of in a licensed facility. Do not reuse container.

14. Transport Information

Land transport

USDOT: Not classified as a dangerous good under transport regulations

Sea transport

IMDG: Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO: Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations:

Chemical: AICS, DSL, IECSC, EINECS, ENCS, KECL, TSCA, US - Released/Listed

SARA 313:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

>=1%	Water	7732-18-5
>=1%	Polyacrylate Resin	CAS# is a trade secret

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>=1% Polyether Polyol 25723-16-4
>=1% Dipropylene Glycol 25265-71-8

New Jersey RTK Special Hazardous Substances Lists:

Weight Percent	Components	CAS-No.
<0.5 %	Ammonia	7664-41-7

Massachusetts Right to Know Extraordinarily Hazardous Substance List:

Weight percent	Components	CAS-No.
<0.5%	Ammonia	7664-41-7
15 - 20 ppm	Distillates (petroleum), hydrotreated light naphthenic	64742-53-6

CA Prop 65: To the best of our knowledge, this product does not contain any of the listed chemical(s) known to the state of California to cause cancer, birth defects, or other reproductive harm.

16. Other Information

NFPA Hazard Codes:

Health	:	1
Fire	:	0
Reactivity	:	0
Special	:	0

SDS Prepared by:
TSC Coatings LLC

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication as part of TSC Coatings LLC Product Safety Program. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information obtained herein. Data sheets are available for all TSC Coatings LLC products. You are urged to obtain data sheets for all TSC Coatings LLC products you buy, process, use or distribute and you are encouraged and requested to advise those who may come in contact with such products of the information contained therein.

To determine applicability or effects of any law or regulation with respect to the product, user should consult his legal advisor or the appropriate government agency. TSC Coatings LLC does not undertake to furnish advice on such matters.