

SAFETY DATA SHEET

SP350 HARDENER

Section 1. Identification

SP350 HARDENER
21350000D

: Product identifier
: SDS code

Recommended use of the chemical and restrictions on use

Identified uses

Paint. Professional use Industrial use

All other uses

Solvent borne coating for interior and exterior use.

: Product use

Supplier's details

MAPAERO SAS
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: Importer
: e-mail address of person
responsible for this SDS
: Emergency telephone
number

Section 2. Hazard identification

ACUTE TOXICITY (oral) - Category 5
SKIN CORROSION/IRRITATION - Category 1B
SKIN SENSITIZATION - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 2

: Classification of the
substance or mixture

GHS label elements



: Hazard pictograms

Danger

May be harmful if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Toxic to aquatic life with long lasting effects.

: Signal word
: Hazard statements

Precautionary statements

Wear protective gloves, protective clothing and eye or face protection. Avoid release to the environment. Avoid breathing vapor.

: Prevention

Date of issue/Date of revision : 6-10-2022

Version : 1.01

Date of previous issue : 30-9-2022

1/11

Section 2. Hazard identification

Collect spillage. IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Not applicable.

Dispose of contents and container in accordance with all local, regional, national and international regulations.

: Response

: Storage

: Disposal

None known.

: Other hazards which do not result in classification

Section 3. Composition/information on ingredients

Mixture : Substance/mixture

CAS number	%	Ingredient name
113930-69-1	≥50 - ≤75	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)
2855-13-2	≥10 - ≤20	3-aminomethyl-3,5,5-trimethylcyclohexylamine
100-51-6	≥10 - ≤20	benzyl alcohol

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

: Eye contact

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

: Inhalation

Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

: Skin contact

Section 4. First aid measures

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

: Ingestion

Most important symptoms/effects, acute and delayed

Potential acute health effects

Causes serious eye damage.

: Eye contact

No known significant effects or critical hazards.

: Inhalation

Causes severe burns. May cause an allergic skin reaction.

: Skin contact

May be harmful if swallowed.

: Ingestion

Over-exposure signs/symptoms

Adverse symptoms may include the following:

pain
watering
redness

: Eye contact

No specific data.

: Inhalation

Adverse symptoms may include the following:

pain or irritation
redness
blistering may occur

: Skin contact

Adverse symptoms may include the following:

stomach pains

: Ingestion

Indication of immediate medical attention and special treatment needed, if necessary

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

: Notes to physician

No specific treatment.

: Specific treatments

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

: Protection of first-aiders

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

: Suitable extinguishing media

None known.

: Unsuitable extinguishing media

In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

: Specific hazards arising from the chemical

Section 5. Fire-fighting measures

Decomposition products may include the following materials:

carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds

: **Hazardous thermal decomposition products**

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

: **Special protective actions for fire-fighters**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

: **Special protective equipment for fire-fighters**

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

: **For non-emergency personnel**

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

: **For emergency responders**

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

: **Environmental precautions**

Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

: **Small spill**

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

: **Large spill**

Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

: **Protective measures**

Section 7. Handling and storage

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

: **Advice on general occupational hygiene**

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

: **Conditions for safe storage, including any incompatibilities**

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

: **Appropriate engineering controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

: **Environmental exposure controls**

Individual protection measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

: **Hygiene measures**

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

: **Eye/face protection**

Skin protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

: **Hand protection**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

: **Body protection**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

: **Other skin protection**

Section 8. Exposure controls/personal protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

: **Respiratory protection**

Section 9. Physical and chemical properties and safety characteristics

Appearance

Liquid.	: Physical state
Colorless.	: Color
Characteristic.	: Odor
Not available.	: Odor threshold
Not available.	: pH
Not available.	: Melting point/freezing point
Not available.	: Boiling point
Closed cup: 105°C (221°F)	: Flash point
Not available.	: Evaporation rate
Not available.	: Flammability
Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)	: Lower and upper explosion limit/flammability limit
Not available.	: Vapor pressure
Highest known value: 3.7 (Air = 1) (benzyl alcohol).	: Relative vapor density
Not available.	: Relative density
Insoluble in the following materials: cold water.	: Solubility
Not available.	: Partition coefficient: n-octanol/water
Not available.	: Auto-ignition temperature
Not available.	: Decomposition temperature
Kinematic (room temperature): 0.48 cm ² /s (48 cSt)	: Viscosity
Kinematic (40°C (104°F)): 1.01 cm ² /s (101 cSt)	
Not available.	: Flow time (ISO 2431)
1.04 g/cm ³	: Density

Section 10. Stability and reactivity

No specific test data related to reactivity available for this product or its ingredients.	: Reactivity
The product is stable.	: Chemical stability
Under normal conditions of storage and use, hazardous reactions will not occur.	: Possibility of hazardous reactions
No specific data.	: Conditions to avoid
No specific data.	: Incompatible materials
Under normal conditions of storage and use, hazardous decomposition products should not be produced.	: Hazardous decomposition products

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Exposure	Dose	Species	Result	Product/ingredient name
-	2000 mg/kg	Rabbit	LD50 Dermal	benzyl alcohol
-	441 mg/kg	Rat	LD50 Intra-arterial	
-	650 mg/kg	Mouse	LD50 Intraperitoneal	
-	400 mg/kg	Rat	LD50 Intraperitoneal	
-	324 mg/kg	Mouse	LD50 Intravenous	
-	53 mg/kg	Rat	LD50 Intravenous	
-	1.5 mL/kg	Rat	LD50 Oral	
-	1660 mg/kg	Rat	LD50 Oral	
-	1230 mg/kg	Rat	LD50 Oral	

Irritation/Corrosion

Observation	Exposure	Score	Species	Result	Product/ingredient name
-	24 hours 100 mg	-	Rabbit	Skin - Moderate irritant	benzyl alcohol

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Not available.

: Information on the likely routes of exposure

Potential acute health effects

Causes serious eye damage.

: Eye contact

No known significant effects or critical hazards.

: Inhalation

Causes severe burns. May cause an allergic skin reaction.

: Skin contact

May be harmful if swallowed.

: Ingestion

Symptoms related to the physical, chemical and toxicological characteristics

Adverse symptoms may include the following:

: Eye contact

pain

watering

redness

Section 11. Toxicological information

No specific data.

: **Inhalation**

Adverse symptoms may include the following:

: **Skin contact**

pain or irritation

redness

blistering may occur

Adverse symptoms may include the following:

: **Ingestion**

stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Not available.

: **Potential immediate effects**

Not available.

: **Potential delayed effects**

Long term exposure

Not available.

: **Potential immediate effects**

Not available.

: **Potential delayed effects**

Potential chronic health effects

Not available.

Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

: **General**

No known significant effects or critical hazards.

: **Carcinogenicity**

No known significant effects or critical hazards.

: **Mutagenicity**

No known significant effects or critical hazards.

: **Reproductive toxicity**

Section 12. Ecological information

Toxicity

Exposure	Species	Result	Product/ingredient name
48 hours	Daphnia - Daphnia magna	Acute EC50 17.4 mg/l Fresh water	3-aminomethyl-3,5,5-trimethylcyclohexylamine benzyl alcohol
96 hours	Fish - Lepomis macrochirus	Acute LC50 10000 µg/l Fresh water	
96 hours	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	Acute LC50 460000 µg/l Fresh water	
96 hours	Fish - Menidia beryllina	Acute LC50 15000 µg/l Marine water	

Persistence and degradability

Not available.

Bioaccumulative potential

Section 12. Ecological information

Potential	BCF	LogP _{ow}	Product/ingredient name
low	4.77	-	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-
low	-	0.99	2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)
low	-	0.87	3-aminomethyl-3,5,5-trimethylcyclohexylamine benzyl alcohol

Mobility in soil

Not available.

: **Soil/water partition coefficient (K_{oc})**

No known significant effects or critical hazards.





: **Other adverse effects**

Section 13. Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

: **Disposal methods**

Section 14. Transport information

IATA	IMDG	UN	
UN3066	UN3066	UN3066	UN number
PAINT	PAINT	PAINT	UN proper shipping name
8 	8  	8 	Transport hazard class(es)
II	II	II	Packing group
Yes. The environmentally hazardous substance mark is not required.	Marine Pollutant(s): 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)	Yes. The environmentally hazardous substance mark is not required.	Environmental hazards

Additional information

Emergency schedules F-A, S-B

: **IMDG**

The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Section 14. Transport information

The environmentally hazardous substance mark may appear if required by other transportation regulations. : IATA

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. : **Special precautions for user**

Not available. : **Transport in bulk according to IMO instruments**

Section 15. Regulatory information

Inventory list

All components are listed or exempted.

At least one component is not listed.

All components are listed or exempted.

All components are listed or exempted.

Japan inventory (ENCS): Not determined.

Japan inventory (ISHL): Not determined.

All components are listed or exempted.

Not determined.

Not determined.

All components are listed or exempted.

Not determined.

All components are listed or exempted.

At least one component is not listed.

All components are listed or exempted.

: **Australia**

: **Canada**

: **China**

: **Europe**

: **Japan**

: **New Zealand**

: **Philippines**

: **Republic of Korea**

: **Taiwan**

: **Thailand**

: **Turkey**

: **United States**

: **Viet Nam**

Section 16. Other information

History

21 October 2022

6 October 2022

30 September 2022

1.01

: **Date of printing**

: **Date of issue/Date of revision**

: **Date of previous issue**

: **Version**

: **Unique ID**

: **Key to abbreviations**

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available

SGG = Segregation Group

UN = United Nations

Procedure used to derive the classification

Section 16. Other information

Justification	Classification
Calculation method	ACUTE TOXICITY (oral) - Category 5
Calculation method	SKIN CORROSION/IRRITATION - Category 1B
Calculation method	SKIN SENSITIZATION - Category 1
Calculation method	AQUATIC HAZARD (LONG-TERM) - Category 2

Indicates information that has changed from previously issued version. 

Notice to reader

FOR PROFESSIONAL USE ONLY

IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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