

SAFETY DATA SHEET



Rev.01/26

KURUMA CLEAR 2:1 K2090 P/A

1. Identification of the substance/preparation and of the company/undertaking

Product name : KURUMA CLEAR 2:1 K2090 P/A
Product type : Paint
Product use : Auto Refinish
Supplier/Manufacturer : TOA Performance Coating Corporation Co., Ltd.
Address : 31/1 Moo 3, Debaratana Rd., KM.23, Bangsaothong,
Amphur Bangsaothong, Samuthprakarn, 10540 Thailand.
Tel. : +66(0)2335-5555
Fax. : +66(0)2312-8928
Emergency telephone number : +66(0)235-5555 #1999

2. Hazards identification

Classification of the substance or mixture

Flammable liquids	Category 3
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Aspiration Hazard	Category 1
Aquatic toxicity (Chronic) Long-term hazard	Category 2

Hazard symbols



Signal word : Danger

Hazard statement : H226 Flammable liquid and vapour
H304 May be fatal if swallowed and enters airways
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness
H361 Suspected of damaging fertility or the unborn child
H411 Toxic to aquatic life with long lasting effects

Precautionary statement : **Prevention**
P203 Obtain, read and follow all safety instructions before use
P210 Keep away from heat/sparks/open flames/hot surfaces.– No smoking.
P233 Keep container tightly closed.
P240 Ground/Bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/ lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment
P280 Wear protective gloves/eye protection/face protection

Response

P301 + P316 IF SWALLOWED: Get emergency medical help immediately
P303 + P361 + P353 IF ON SKIN: Remove/Take off immediately all contaminated clothing.Rinse skin with water/shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P318 IF exposed or concerned,get medical advice
P370 + P378 In case of fire: Use appropriate media for extinction.
P391 Collect spillage

Storage

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

P403 + P235 Store in a well-ventilated place, Keep cool.

P405 Store locked up

Disposal

P501 Dispose of contents/container in accordance with local/regional/nation/ international regulations.

3. Composition/information on ingredients

Chemical name	CAS No.	Concentration(%)
Acrylic resin	Proprietary	51 - 55
Butyl acetate	123-86-4	20 - 25
PM acetate	108-65-6	15 - 20
Xylene	1330-20-7	5 - 10
Naphtha (Petroleum) light aromatic	64742-95-6	1 - 5

4. First aid measures.

General Advice	: If symptoms persist, call a physician.
Eye Contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minute. Get medical advice / attention.
Skin Contact	: Do NOT use solvents or thinner .Remove contaminated clothing immediately and Wash off with plenty of water .If skin irritation persists, get medical advice / attention.
Inhalation	: Move to fresh air. Get medical attention if symptoms occur. Risk of serious damage to the lungs.
Ingestion	: Rinse mouth with fresh water . Do not induce vomiting. Call a physician immediately. If vomiting occurs naturally, have victim lean forward.

5. Fire-fighting measures

Extinguishing Media

Suitable extinguishing media	: Use water spray, dry chemical powder, Carbon dioxides, foam
Unsuitable extinguishing media	: Do not use water jet

Special hazards arising from the substance or mixture

Fire hazard	: In a fire or if heated, a pressure in crease will occur and the container may burst, with the risk of a subsequent explosion. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Thermal decomposition products	: Decomposition products may be hazardous to health.

Special protective equipment and precautions for fire-fighters

Protective actions for firefighters	: 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. Move containers from fire area if this can be done with out risk. Use water spray to keep fire-exposed containers cool.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: Do not attempt to take action without suitable protective equipment

Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused enviromental pollution. Water polluting material. May be harmful to the environment. If released in large quantities.

Methods and material for containment and cleaning up

:	Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
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7. Handling and storage

Handling	: Handle in good ventilated area.
	: Wash thoroughly hand and face after handling.
	: Close tightly container with closer necessarily during and after use.
	: Wear antistatic suits and shoes , while working.
	: Use handtool of spark proof type and ground equipment.
	: Wear proper protectors to avoid contact of skin or eyes when handling open containers.
	: Install proper local ventilator and wear proper protector in closed space.
Storage	: Keep container closed and avoid direct sunlight.
	: Store in good ventilation.
	: Store with keeping away from ignition or heat source.

8. Exposure controls/personal protection

Controlparameters	: Xylene OSHA : PEL-TWA 100 ppm (435 mg/m3) PEL-STEL 150 ppm (655 mg/m3) NIOSH : REL-TWA 100 ppm (435 mg/m3) REL-STEL 150 ppm (655 mg/m3) Butyl acetate OSHA : PEL TWA 150 ppm (710 mg/m3) PEL STEL 200 ppm (950 mg/m3) NIOSH : REL TWA 150 ppm (710 mg/m3) REL STEL 200 ppm (950 mg/m3) PM acetate OSHA : CAPEL TWA 100 ppm (541 mg/m3) CAPEL STEL 150 ppm (811 mg/m3)
Engineeringcontrols	: Use only in a well-ventilated area. Use local exhaust ventilation
Personalprotection	
Respirationprotection	: Organic vapor respirator
Eye/Faceprotection	: Safety google and face shield
Skinprotection	: Wear protective clothing
Bodyprotection	: Wear protective clothing
Work/HygienicPractices	: Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

9. Physical and chemical properties

Appearance and Colour	: Liquid, Clear
Odour	: Solvent Odour
Odour Threshold	: Not available
pH	: Not available
Melting point/freezing point	: Not available
initial boiling point and boiling range	: Not available
Flash point	: 31 °C
Evaporation rate	: Not available
Flammability (solid, gas)	: Not available
Vapour pressure	: Not available
Vapour density	: Not available
Relative density at 25C	: 0.98 – 1.00 g/cm3
Solubility	: None or poor in water
Log Pow	: Not available
Auto ignition temperature	: Not available
Decomposition temperature	: Not available
Viscosity	: Not available

10. Stability and reactivity

Reactivity	: Not available
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Hazardous reactions will not occur under normal conditions.
Conditions to Avoid	: High temperature, direct sunlight.
Materials to Avoid	: Acid, alkaline and Strong oxidising agent and reducing agents or peroxide fumes.

Hazardous Decomposition : Carbon monoxide , Carbon dioxide toxic or asphyxiating gases

11. Toxicological information

Acute oral toxicity : ATE mix (oral/rat) 15566 mg/kg (Not classified)
Acute dermal toxicity : ATE mix (skin/rabbit) 14412 mg/kg (Not classified)
Acute inhalation toxicity : ATE mix (inhale/rat) 42.06 mg/L/4 hr (Not classified)
Skin corrosion / irritation : Not classified
Serious eye damage/eye irritation : Not classified
Respiratory sensitization : Not classified
Skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Suspected of damaging fertility or the unborn child
STOT - single exposure : May cause respiratory irritation, May cause drowsiness or dizziness
STOT - repeated exposure : Not classified
Aspiration hazard : May be fatal if swallowed and enters airways

12. Ecological information

Acute aquatic hazard : Not classified
Long-term aquatic hazard : Toxic to aquatic life with long lasting effects
Persistence and degradability : Not rapidly degradability
Bioaccumulative potential : Not available
Mobility in soil : Not available
Other adverse effects : Not available

13. Disposal considerations

Disposal methods : Dispose of contents in accordance with local/national and international regulations or handled by authorized waste collector in your country
Container Management : Dispose of container in accordance with all local, regional, national and international regulations.

14. Transport information

UN.Number : 1263
ProperShippingName : Paint
UN.Class : 3
PackingGroup : III
Environmentalhazards : NO
LandTransportation : Accord to each transportation under " ADR/RID code "
AirTransportation : Accord to each transportation under " ICAO/IATA code "
MaritimeTransportation : Accord to each transportation under " IMO/IMDG code "

15. Regulatory information

Thai regulation : Thai land Notification of Ministry of Industry Subject.
List of hazardous substances B.E. 2556 (2013)
: Thai land Notification of Ministry of Labour Subject.
List of hazardous chemicals B.E. 2556 (2013)

16. Other information

Created : 2026

References :

- 1) <https://pubchem.ncbi.nlm.nih.gov/>
- 2) https://www.nite.go.jp/chem/english/ghs/all_fy_e.html
- 3) United States National Library of Medicine: ChemIDplus Lite (ID PLUS)
<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM>
- 4) New Jersey Department of Health (DOH)
<http://web.doh.state.nj.us/rtkhsfs/qsearch.aspx>.

- 5) International Uniform Chemical Information Database (IUCLID)
<http://ecb.jrc.ec.europa.eu/esis/index.php?PGM=dat>
- 6) CHEMTRACK
<http://www.chemtrack.org/Chem-Result.asp>
- 7) SIGMA-ALDRICH
<http://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?>
Occupational Safety & Health Administration (OSHA)
<http://www.osha.gov/dts/chemicalsampling/toc/chmcas.html>
- 8) ECHA.europa.eu
<https://chem.echa.europa.eu/>

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

SAFETY DATA SHEET



Rev.01/26

KURUMA CLEAR 2:1 K2090 P/B

1. Identification of the substance/preparation and of the company/undertaking

Product name : KURUMA CLEAR 2:1 K2090 P/B
Product type : Paint
Product use : Auto Refinish
Supplier/Manufacturer : TOA Performance Coating Corporation Co., Ltd.
Address : 31/1 Moo 3, Debaratana Rd., KM.23, Bangsaothong,
Amphur Bangsaothong, Samuthprakarn, 10540 Thailand.
Tel. : +66(0)2335-5555
Fax. : +66(0)2312-8928
Emergency telephone number : +66(0)235-5555 #1999

2. Hazards identification

Classification of the substance or mixture

Flammable liquids	Category 3
Acute toxicity : Oral	Category 4
Acute toxicity : Inhalation	Category 2
Skin corrosion / Irritation	Category 2
Serious eyes damage / Eyes irritation	Category 2A
Respiratory sensitisation	Category 1
Skin sensitisation	Category 1
Carcinogenicity	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Aspiration Hazard	Category 1
Aquatic toxicity (Chronic) Long-term hazard	Category 2

Hazard symbols



Signal word : Danger

Hazard statement : H226 Flammable liquid and vapour
H302 Harmful if swallowed
H304 May be fatal if swallowed and enters airways
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H330 Fatal in inhaled
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness
H351 Suspected of causing cancer
H361 Suspected of damaging fertility or the unborn child
H411 Toxic to aquatic life with long lasting effects

Precautionary statement : **Prevention**
P203 Obtain, read and follow all safety instructions before use
P210 Keep away from heat/sparks/open flames/hot surfaces.– No smoking.
P233 Keep container tightly closed.
P240 Ground/Bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/ lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge
P260 Do not breathe dust/fume/gas/mist/vapours/spray

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 Wash hand, mouth, etc, thoroughly after handling
 P265 Do not touch eyes
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment
 P280 Wear protective gloves/eye protection/face protection
 P284 In case of inadequate ventilation wear respiratory protection

Response

P301 + P316 IF SWALLOWED: Get emergency medical help immediately
 P301 + P317 IF SWALLOWED: Get medical help
 P302 + P352 IF ON SKIN:Wash with plenty of soap and water.
 P303 + P361 + P353 IF ON SKIN: Remove/Take off immediately all contaminated clothing.Rinse skin with water/shower.
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P316 Get emergency medical help immediately
 P318 IF exposed or concerned,get medical advice
 P319 Get medical help if you feel unwell.
 P320 Specific treatment is urgent (see information on this label and safety data sheet)
 P321 Specific treatment (See on First Aid Measures)
 P322 Specific treatment is urgent (see information on this label and safety data sheet)
 P323 Specific treatment (See on First Aid Measures)
 P330 Rinse mouth
 P332 + P317 If skin irritation occurs: Get medical help
 P337 + P317 If eye irritation persists: Get medical help
 P342 + P316 If experiencing respiratory symptoms : Get emergency medical help immediately
 P362 + P364 Take off contaminated clothing and wash it before reuse
 P370 + P378 In case of fire: Use appropriate media for extinction.
 P391 Collect spillage

Storage

P403 + P235 Store in a well-ventilated place,Keep cool.
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up

Disposal

P501 Dispose of contents/container in accordance with local/regional/nation/ international regulations.

3. Composition/information on ingredients

<u>Chemical name</u>	<u>CAS No.</u>	<u>Concentration(%)</u>
Isocyanate	Proprietary	30 - 35
Butyl acetate	123-86-4	25 - 30
Xylene	1330-20-7	25 - 30
Naphtha (Petroleum) light aromatic	64742-95-6	5 - 10

4. First aid measures.

General Advice : If symptoms persist, call a physician.
 Eye Contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minute.
 Get medical advice / attention.
 Skin Contact : Do NOT use solvents or thinner .Remove contaminated clothing immediately and Wash off with plenty of water .If skin irritation persists, get medical advice / attention.
 Inhalation : Move to fresh air. Get medical attention if symptoms occur. Risk of serious damage to the lungs.
 Ingestion : Rinse mouth with fresh water . Do not induce vomiting. Call a physician immediately.
 If vomiting occurs naturally, have victim lean forward.

5. Fire-fighting measures

Extinguishing Media

- Suitable extinguishing media : Use water spray, dry chemical powder, Carbon dioxides, foam
- Unsuitable extinguishing media : Do not use water jet

Special hazards arising from the substance or mixture

- Fire hazard : In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Thermal decomposition products : Decomposition products may be hazardous to health.

Special protective equipment and precautions for fire-fighters

- Protective actions for firefighters : 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel : 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders : Do not attempt to take action without suitable protective equipment

- Environmental precautions** : 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. Water polluting material. May be harmful to the environment. If released in large quantities.

Methods and material for containment and cleaning up

- : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

7. Handling and storage

- Handling :
 - : Handle in good ventilated area.
 - : Wash thoroughly hand and face after handling.
 - : Close tightly container with cap/cover necessarily during and after use.
 - : Wear antistatic suits and shoes, while working.
 - : Use handtool of spark proof type and ground equipment.
 - : Wear proper protectors to avoid contact of skin or eyes when handling open containers.
 - : Install proper local ventilator and wear proper protector in closed space.
- Storage :
 - : Keep container closed and avoid direct sunlight.
 - : Store in good ventilation.
 - : Store with keeping away from ignition or heat source.

8. Exposure controls/personal protection

- Control parameters : Xylene
 - OSHA : PEL-TWA 100 ppm (435 mg/m³)
 - PEL-STEL 150 ppm (655 mg/m³)
 - NIOSH : REL-TWA 100 ppm (435 mg/m³)
 - REL-STEL 150 ppm (655 mg/m³)
- Butyl acetate
 - OSHA : PEL TWA 150 ppm (710 mg/m³)
 - PEL STEL 200 ppm (950 mg/m³)
 - NIOSH : REL TWA 150 ppm (710 mg/m³)
 - REL STEL 200 ppm (950 mg/m³)
- Engineering controls : Use only in a well-ventilated area. Use local exhaust ventilation
- Personal protection
- Respiration protection : Organic vapor respirator
- Eye/Face protection : Safety goggles and face shield

Skinprotection : Wear protective clothing
Bodyprotection : Wear protective clothing
Work/HygienicPractices : Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

9. Physical and chemical properties

Appearance and Colour : Liquid, Clear
Odour : Solvent Odour
Odour Threshold : Not available
pH : Not available
Melting point/freezing point : Not available
initial boiling point and boiling range : Not available
Flash point : 31 °C
Evaporation rate : Not available
Flammability (solid, gas) : Not available
Vapour pressure : Not available
Vapour density : Not available
Relative density at 25C : 0.94 – 0.96 g/cm3
Solubility : None or poor in water
Log Pow : Not available
Auto ignition temperature : Not available
Decomposition temperature : Not available
Viscosity : Not available

10. Stability and reactivity

Reactivity : Not available
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : Hazardous reactions will not occur under normal conditions.
Conditions to Avoid : High temperature, direct sunlight.
Materials to Avoid : Acid, alkaline and Strong oxidising agent and reducing agents or peroxide fumes.
Hazardous Decomposition : Carbon monoxide , Carbon dioxide toxic or asphyxiating gases

11. Toxicological information

Acute oral toxicity : ATE mix (oral/rat) 1730 mg/kg (Category 4)
Acute dermal toxicity : ATE mix (skin/rabbit) 6217 mg/kg (Not classified)
Acute inhalation toxicity : ATE mix (inhale/rat) 0.36 mg/L/4 hr (Category 2)
Skin corrosion / irritation : Causes skin irritation
Serious eye damage/eye irritation : Causes serious eye irritation
Respiratory sensitization : May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin sensitization : May cause an allergic skin reaction
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer
Reproductive toxicity : Suspected of damaging fertility or the unborn child
STOT - single exposure : May cause respiratory irritation, May cause drowsiness or dizziness
STOT - repeated exposure : Not classified
Aspiration hazard : May be fatal if swallowed and enters airways

12. Ecological information

Acute aquatic hazard : Not classified
Long-term aquatic hazard : Toxic to aquatic life with long lasting effects
Persistence and degradability : Not rapidly degradability
Bioaccumulative potential : Not available
Mobility in soi : Not available
Other adverse effects : Not available

13. Disposal considerations

Disposal methods : Dispose of contents in accordance with local/national and international regulations or handled by authorized waste collector in your country

Container Management : Dispose of container in accordance with all local, regional, national and international regulations.

14. Transport information

UN.Number : 1263
ProperShippingName : Paint
UN.Class : 3
PackingGroup : III
Environmentalhazards : NO
LandTransportation : Accord to each transportation under " ADR/RID code "
AirTransportation : Accord to each transportation under " ICAO/IATA code "
MaritimeTransportation : Accord to each transportation under " IMO/IMDG code "

15. Regulatory information

Thai regulation : Thai land Notification of Ministry of Industry Subject.
List of hazardous substances B.E. 2556 (2013)
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List of hazardous chemicals B.E. 2556 (2013)

16. Other information

Created : 2026
References :
1) <https://pubchem.ncbi.nlm.nih.gov/>
2) https://www.nite.go.jp/chem/english/ghs/all_fy_e.html
3) United States National Library of Medicine: ChemIDplus Lite (ID PLUS)
<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM>
4) New Jersey Department of Health (DOH)
<http://web.doh.state.nj.us/rtkhsfs/qsearch.aspx>
5) International Uniform Chemical Information Database (IUCLID)
<http://ecb.jrc.ec.europa.eu/esis/index.php?PGM=dat>
6) CHEMTRACK
<http://www.chemtrack.org/Chem-Result.asp>
7) SIGMA-ALDRICH
<http://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?>
Occupational Safety & Health Administration (OSHA)
<http://www.osha.gov/dts/chemicalsampling/toc/chmcas.html>
8) ECHA.europa.eu
<https://chem.echa.europa.eu/>

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.