

SAFETY DATA SHEE



Primax Protect

Section 1. Identi	fication
Product identifier	: Primax Protect
Product code	: 31002
Product type	: Powder coating.
Other means of identification	: Not available.
Recommended use of the	e chemical and restrictions on use
Use in coatings - Industrial	use
Supplier's details	 Jotun Powder Coatings U.A.E. Ltd. (LLC) P.O. Box 51033 Dubai U.A.E Phone : + 971 4 347 2515 Fax : + 971 4 347 2815 Jotun Powder Coatings Saudi Arabia Co.Ltd 3078 – Industrial City 2, Ad Dammam, 34326-6419,
	Kingdom of Saudi Arabia. Office: +966 13 812 1259 Ext.211 Fax: +966 13 812 1226 sdsjotun@jotun.no
Emergency telephone	: JOTUN POWDER COATINGS U.A.E.Ltd. (LLC)
number	Phone : + 971 4 347 2515
Section 2. Haza	rd identification
Classification of the substance or mixture	 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SKIN SENSITISATION - Category 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1



Signal word **Hazard statements**

GHS label elements Hazard pictograms

- : Warning.
- : H317 May cause an allergic skin reaction. H319 - Causes serious eye irritation.
 - H410 Very toxic to aquatic life with long lasting effects.

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Section 2. Hazard identification

Precautionary statements	
General	: Not applicable.
Prevention	 P280 - Wear protective gloves. Wear eye or face protection. P273 - Avoid release to the environment. P261 - Avoid breathing dust.
Response	 P391 - Collect spillage. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
Storage	: Not applicable.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not : None known. result in classification

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Not available.

Ingredient name	%	CAS number
zinc	≥50 - ≤75	7440-66-6
zinc oxide	≤5	1314-13-2
imidodicarbonimidic diamide, n-(2-methylphenyl)-	<3	93-69-6

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

Eye contact	: 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. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if adverse health effects persist or are severe. 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.
Skin contact	: 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. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Section 4. First aid measures

Ingestion	: Wash out mouth with water. Remove dentures if any. 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. Get medical attention if adverse health effects persist or are severe. 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.
Most important sym	ptoms/effects, acute and delayed

Potential acute health effec	<u>ts</u>		
Eye contact	: Causes serious eye irritation.		
Inhalation	: No known significant effects or critical hazards.		
Skin contact	: May cause an allergic skin reaction.		
Ingestion	: No known significant effects or critical hazards.		
Over-exposure signs/symptoms			
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness		
Inhalation	: No specific data.		
Skin contact	: Adverse symptoms may include the following: irritation redness		
Ingestion	: No specific data.		

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

Notes to physician	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.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. 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.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media		
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.	
Unsuitable extinguishing media	: None known.	
Specific hazards arising from the chemical	: Fine dust clouds may form explosive mixtures with air.	
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides	

Section 5. Firefighting measures

Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident there is a fire. No action shall be taken involving any personal risk or without suitable training.	t if
Special protective equipment 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.	

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures		
For non-emergency personnel	lo action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel fr ntering. Do not touch or walk through spilt material. Provide adequate ventila Vear appropriate respirator when ventilation is inadequate. Put on appropriate ersonal protective equipment.	om ation.
For emergency responders	specialised clothing is required to deal with the spillage, take note of any formation in Section 8 on suitable and unsuitable materials. See also the formation in "For non-emergency personnel".	
Environmental precautions	void dispersal of spilt material and runoff and contact with soil, waterways, dra nd sewers. Inform the relevant authorities if the product has caused environn ollution (sewers, waterways, soil or air). Water polluting material. May be have the environment if released in large quantities. Collect spillage.	nental
Methods and material for containment and cleaning up		
Small spill	love containers from spill area. Avoid dust generation. Using a vacuum with IEPA filter will reduce dust dispersal. Place spilled material in a designated, abeled waste container. Dispose of via a licensed waste disposal contractor.	
Large spill	Nove containers from spill area. Approach the release from upwind. Prevent on to sewers, water courses, basements or confined areas. Avoid dust generati to not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and p to a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Sectior	on. lace

Section 7. Handling and storage

for waste disposal.

Precautions for safe handling		
Protective measures	:	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 ingest. Avoid release to the environment. 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.
Advice on general occupational hygiene	:	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.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Additional information on storage conditions Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep container tightly closed. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

See Technical Data Sheet / packaging for further information.

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Section 8. Exposure controls/personal protection

Control parameters

Dust Limit : 10 mg/m³ (TWA of total inhalable dust) and 4 mg/m³ (TWA of respirable)

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls		Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	t	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.
Individual protection measu	<u>res</u>	
Hygiene 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 clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. **Eye/face protection** : Safety eyewear complying to ISO 16321-1:2022 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.

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

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Skin protection	
Hand protection	 There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.
	Wear suitable gloves tested to ISO 374-1:2016. Recommended, gloves(breakthrough time) > 8 hours: butyl rubber (> 0.4 mm), nitrile rubber (> 0.75 mm)
	For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.
	The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
Body 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.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be

Section 8. Exposure controls/personal protection

Respiratory protection

: If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. If dust is generated and ventilation is inadequate, use respirator that will protect against dust/mist. (FFP2 / N95).

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance				
Physical state	1	Solid. Powder.		
Colour	1	Various.		
Odour	1	Odourless.		
Odour threshold	1	Not applicable.		
рН	1	Not applicable.		
Melting point (dust)	1	85 - 115 °C		
Boiling point	1	Not applicable.		
Flash point	4	Not applicable.		
Evaporation rate	4	: Not applicable.		
Flammability	4	: Fine dust clouds may form explosive mixtures with air.		
Lower explosion limit (dust)	4	30 g/m³ (EN 14034-3)		
Minimum ignition energy (mJ)	1	: 10 - 30 (EN 13821)		
Vapour pressure	1	Not applicable.		
Vapour density	: Not applicable.			
Density	4	: 3 to 3.2 g/cm ³		
Solubility(ies)	4			
Media		Result		
cold water hot water		Not soluble Not soluble		

not water		Not soluble
Partition coefficient: n- octanol/water	: Not	applicable.
Auto-ignition temperature	: > 40	0°C
Decomposition temperature	: >230	0°C (>446°F)
Viscosity	: Not	applicable.
Particle characteristics		
Median particle size	: Not	available.

Section 10. Stability and reactivity

Reactivity	: Fine dust clouds may form explosive mixtures with air.
Chemical stability	: Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame).
	Take precautionary measures against electrostatic discharges.
	To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.
	Prevent dust accumulation.
Incompatible materials	: Not applicable.
Hazardous decomposition products	: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
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Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
imidodicarbonimidic diamide, n-(2-methylphenyl)-	LD50 Dermal	Rat - Male, Female	>3100 mg/kg	-
	LD50 Oral	Rat - Male	2390 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
zinc	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
zinc oxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
imidodicarbonimidic diamide n-(2-methylphenyl)-	, Eyes - Severe irritant	Rabbit	-	24 hours 100 microliters	-

Sensitisation

••••••	Route of exposure	Species	Result
imidodicarbonimidic diamide, n-(2-methylphenyl)-	skin	Mammal - species unspecified	Sensitising

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.

Information on likely routes : Not available. of exposure

Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Section 11. Toxicological information

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.

Delayed and immediate effect	ts as well as chronic effects from short and long-term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	ects
Not available.	
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
zinc	Acute LC50 330 µg/l Fresh water Acute LC50 0.78 mg/l Fresh water	Daphnia - Daphnia magna Fish	48 hours 96 hours
zinc oxide	Acute LC50 1.1 ppm Fresh water Chronic NOEC 0.02 mg/l Fresh water	Fish - Oncorhynchus mykiss Algae - Pseudokirchneriella subcapitata - Exponential growth phase	96 hours 72 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
zinc	-	-	Not readily
zinc oxide	-	-	Not readily

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
zinc oxide	-	28960	high

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimised 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
	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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

UN	INDO	
UN	IMDG	ΙΑΤΑ
3077	UN3077	UN3077
ostance, solid, n.o.s. (zinc)	Environmentally hazardous substance, solid, n.o.s. (zinc). Marine pollutant (zinc, zinc oxide)	Environmentally hazardous substance, solid, n.o.s. (zinc)
		9
		III
5.	Yes.	Yes.
s.		III Yes.

Additional information UN

UN	: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
IMDG	 This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Emergency schedules F-A, S-F
ΙΑΤΑ	: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Section 14. Transport information		
ADR/RID	 This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. <u>Hazard identification number</u> 90 <u>Tunnel code</u> (-) 	
Special precautions for user	: 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.	
Transport in bulk according	: Not available.	

to IMO instruments

Section 15. Regulatory information

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

<u>History</u>	
Date of printing	: 07.11.2023
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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 = International Air Transport Association IBC = 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

Classification	Justification
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SKIN SENSITISATION - Category 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1	Calculation method Calculation method Calculation method Calculation method
References : Not available.	

Date of issue/Date of revision

Section 16. Other information

Indicates information that has changed from previously issued version.

Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.